Profiles: The top 200

'84 payouts top contributions

By Trudy Ring

Many large corporate and union pension sponsors contributed less to their pension funds than they paid in benefits in 1984, as the plans neared or reached full funding and as the number of retirees increased.

A survey of 69 corporate and union pension funds showed the amount that benefit payments exceeded contributions dropped by more than two-thirds between 1983 and 1984.

Benefit payments exceeded contributions by $305 million for the year ended Sept. 30, compared with a $1 billion excess of benefits over contributions a year earlier.

The 69 pension funds were chosen because they were ranked in *Pensions & Investment Age's* Top 200 both years, and provided contribution and benefit figures each year.

The funds' contributions dropped 0.2%, to $9.19 million in 1984, from $9.21 billion in 1983, while benefits rose 16%, to $9.5 billion from $8.1 billion.

A study by SEI-Funds Evaluation, Chicago, confirmed a trend toward benefit payments becoming greater than company contributions.

The study, conducted for the Federal Reserve Bank, showed there was a net outflow of pension assets in the quarter ended June 30 of $659 million, and a net outflow of $60 million in the September quarter.

Don Korytowski, vice president in charge of product planning at the consulting firm, gave a number of reasons for the development.

Because of good investment performance in recent years, particularly in 1982, many funds were fully funded or overfunded, so contributions had to be cut back. In addition, many companies had reduced employment during the recession, reducing the future liability. Even those companies whose funds were not fully funded had been able to increase their interest assumptions or reduce their salary assumptions, thus reducing contributions.

On the other hand, "the benefits are going up because the plans are maturing and people are retiring," said Paul Jackson, vice president of The Wyatt Co., an actuarial firm based in Washington, D.C.

Mr. Jackson said increases in the market value of pension assets due to good investment performance during 1983 pushed many plans near the full funding mark, leading to decreased contributions in 1984.

An official of R.J. Reynolds Industries, Winston-Salem, N.C., concurred with that conclusion.

"The reduction in contributions generally reflects the good performance of the funds over the last few years, so they're able to be adequately funded without a lot of new contributions," said the official.

R.J. Reynolds' contributions totaled $52 million in 1984, down from $95 million in 1983. Benefit payments were $55 million last year and $58 million in 1983.

Several pension funds received little or no contributions in 1984.

Hercules Inc., Wilmington, Del., made no pension contribution because its plan is fully funded. When plans are fully funded, sponsoring companies no longer receive tax deductions for new contributions.

Hercules paid out $32 million in benefits last year. In 1983, it had made a contribution of $40.8 million and paid out $31.2 million.

The Firestone Tire and Rubber Co., Akron, Ohio, made no pension contribution for the second consecutive year. The plan is overfunded by an estimated $373 million, and Firestone is ending it to recapture between $250 million and $300 million in assets, replacing it with another defined benefit plan with equal benefits. The company bought annuities from CIGNA Corp. as an early step in the procedure.

Firestone's 1984 benefit payments amounted to $104 million, down from $120 million in 1983.

FMC Corp., Chicago, cut pension contributions sharply because the plan is approaching full funding. Officials did not disclose the size of the pension contributions, but said most of the $12 million in new funding went to a 401(k) plan. FMC paid $40 million in benefits in 1984. In 1983, it made $40 million in contributions and paid $30 million in benefits.

Declines in employment led to decreased contributions and increased benefit payments in some cases. The New York-based U.S. Steel and Carnegie Pension Fund's benefit payments increased as many workers took early retirement, while contributions decreased because they are tied to employment levels.

Contributions to the fund for 1984 amounted to $202 million, while benefits paid came to $795 million. The difference was even greater than in 1983, when contributions were $295 million and benefit payments, $700 million.

U.S. Steel officials said they do not expect contribution levels to pick up unless the steel industry does. Also, they expect high benefit levels to continue for many years.

Officials of McDermott International, Nassau, Bahamas, also said declining employment was responsible for decreased contributions. Contributions declined to $50 million in 1984 from $80 million in 1983. Benefit payments amounted to $48 million in 1984 and $40 million in 1983.

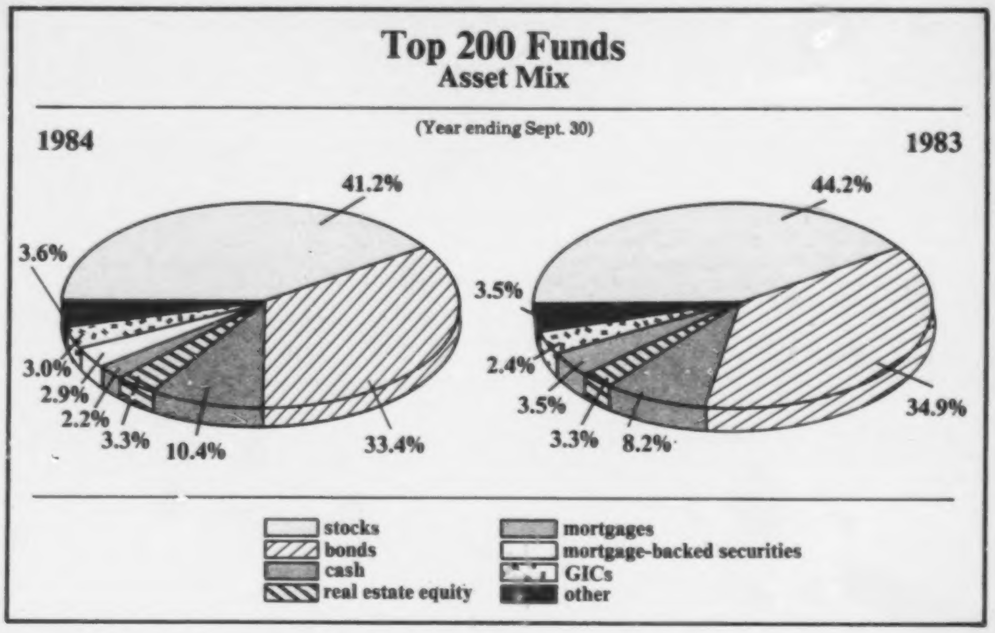
Dedication of assets also resulted in lowered contributions for some companies. Eli Lilly & Co., Indianapolis, attributed its decrease in contributions, to $46 million from $68 million, partly to a dedicated bond portfolio. Lilly's benefit payments changed little from 1983 to 1984, going to $30 million from $28 million.

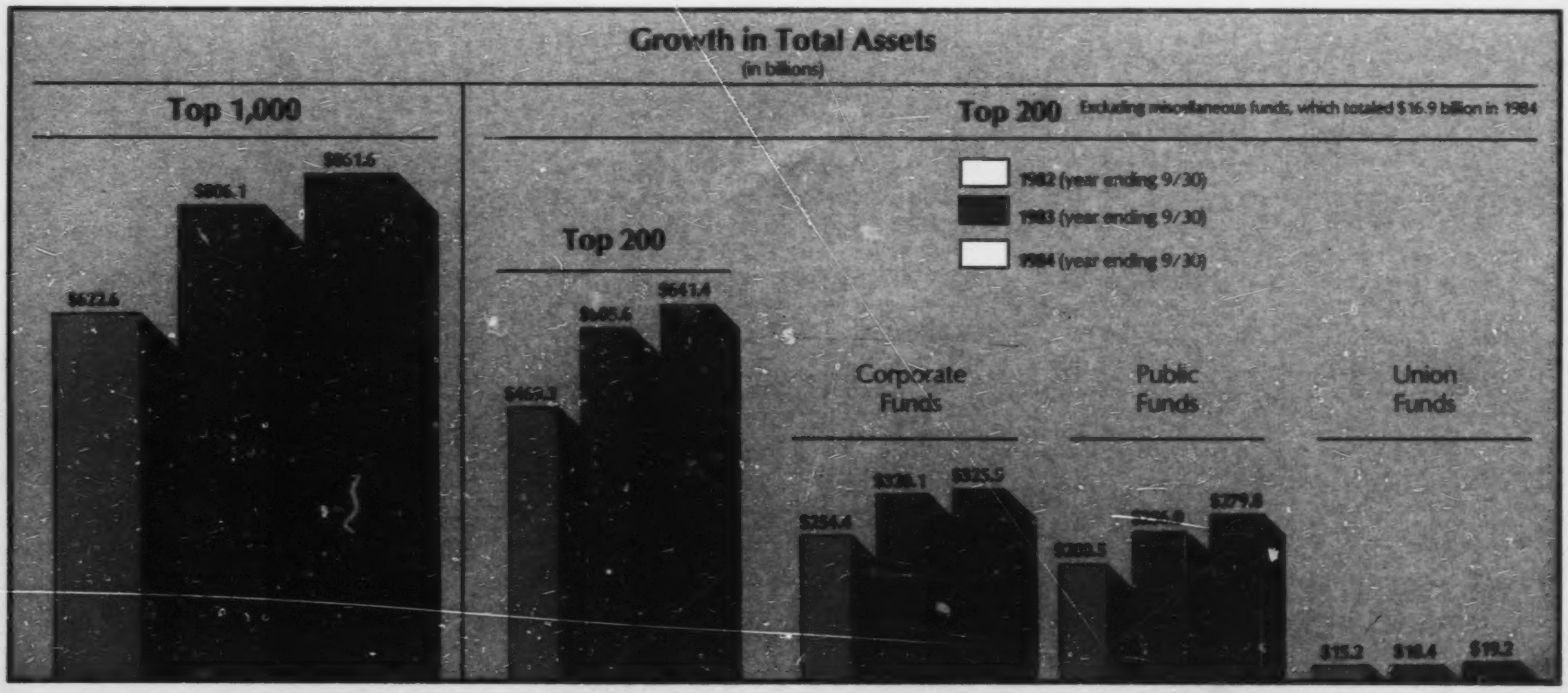
Officials of Bethlehem Steel Corp., Bethlehem, Pa., expect last year's dedication of the fund's entire $1.328 billion fixed-income position to save the company about $50 million in annual contributions in the coming years. The company's 1984 contribution was $300 million, down from $360 million in 1983, while benefits also declined, to $425 million from $500 million.

Several companies that bucked the trend by increasing contributions in 1984 had substantial unfunded pension liabilities.

For instance, International Harvester Co., Chicago, resumed annual contributions after having deferred most of them in 1982 and 1983. Harvester's 1984 contributions amounted to $117 million, up from $40 million in 1983. Benefit payments were $200 million in 1984 and $220 million in 1983.

Chrysler Corp., Detroit, stepped up its contributions to further reduce unfunded liabilities. Contributions came to $456 million in 1984, up from $270 million in 1983. Benefit payments were $360 million last year, up slightly from 1983's $340 million. ■





Top funds . . .

Continued from page 3

funds grew 4.3% to $19.2 billion.

The fastest growth among the nation's largest employee benefit plans occurred among those ranked 201 to 1,000. The assets of these 800 plans grew 10% during the year to $220.1 billion.

Contributions by the sponsors of the 200 largest plans declined by $3.4 billion during the year to $30.3 billion. This followed a similar decline in 1983 from the peak of $37.1 billion in 1982.

Approximately $300 million of the decline in contributions resulted from the dropping of funds from the Top 200 brought about by the AT&T breakup.

Corporate fund growth also was affected by the weakness of the American metals industries and employment declines in other industries.

The decline in employment in these industries has affected contributions to the funds, and in the case of the U.S. Steel & Carnegie Pension Plan, benefit payments far exceed contributions. (*See related story, page 13*).

As corporations moved to lock up the market gains of the past several years, they dramatically reduced their average commitment to common stocks. This declined to 48.2% in 1984 from 55.1% in 1983.

The total fixed-income commitment, including bonds, mortgage-backed securities, mortgages and GICs, increased to 33.3% from 29.8%. Even this might be understated as other investments, principally annuities, increased to 5.1% from 2.4%.

Within the fixed-income commitment, the GIC holdings more than doubled to 4.5% from 1.8%.

The real estate equity investments declined to 3.9% from 4.3%, and the cash position increased to 9.5% from 8.4% in 1983.

Public funds slightly reduced their stock and bond commitments while increasing their mortgage, mortgage-backed securities and cash positions.

Their common stock position declined to 27.1% from 28.7%, and the bond position dropped to 47.8% from 51.5%. The cash position climbed to 11.1% from 9.5% last year, and the mortgage and mortgage-backed securities position grew to 11.3% from 8.9% a year ago.

Union funds increased their equity commitments to 28.3% from 26.2%, while reducing their total fixed-income investments slightly to 51.7% from 54.9%. They increased their real estate equity investments to 6% from 5.1%, while leaving cash almost unchanged at 14%.

For the first time, each of the Top 5 employee benefit plans has assets of more than $20 billion. Because of the breakup of the AT&T plan, the New York State Common Retirement Fund replaced AT&T as the employee benefit system with the largest pool of assets — $22.8 billion as of Sept. 30.

The state's contribution to the fund totaled $1.5 billion in 1984 and benefit payments totaled $785 million.

Most of the assets, $19.9 billion, are managed internally, although eight outside equity managers and two outside real estate managers are used.

While 31.7% of the assets are invested in equities and 38.2% in bonds, the fund has significant commitments in mortgages and mortgage-backed securities, with smaller commitments to real estate and venture capital.

The second largest fund was that of General Motors Corp., which offers its employees a pension plan with assets of approximately $20.3 billion and thrift plan assets of approximately $2.5 billion, for a total estimated by *Pensions & Investment Age* at $22.8 billion.

The California Public Employees Retirement System was the third largest, with assets of $22.7 billion, followed by the AT&T plan, $21.5 billion, and the New York City Employees Retirement System, $21.2 billion.

There are 85 plans with assets of more than $2 billion and 168 with assets of more than $1 billion. The smallest plan in the Top 200 is that of Sandia National Laboratories with assets of $764 million.

These statistics were obtained from *P&I Age* questionnaires sent to the sponsors of the nation's 200 largest employee benefit systems. Less detailed questionnaires were sent to the next 800.

For a few funds that did not respond before the deadline, the information was obtained from the 1985 Money Market Directory.

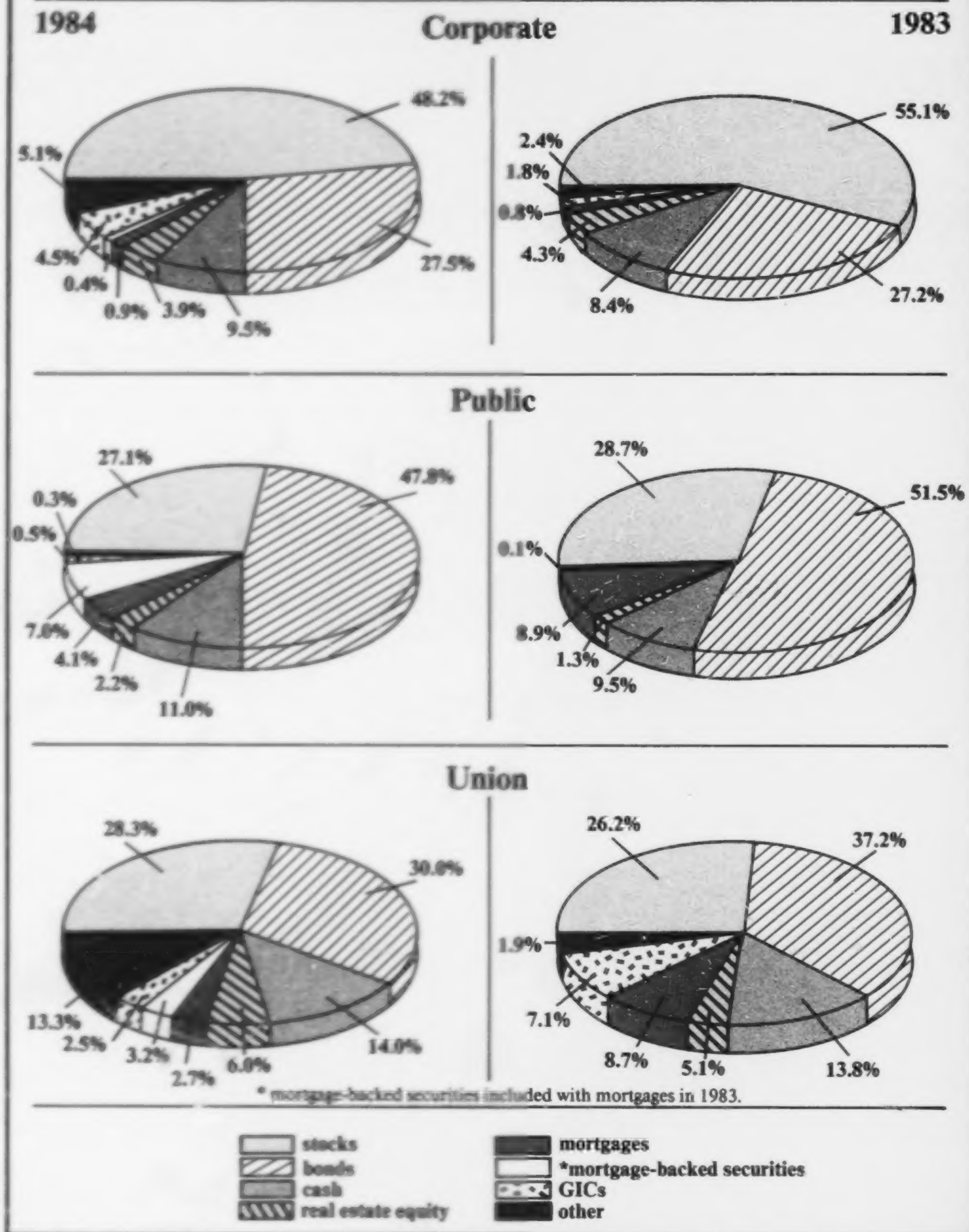
Other information obtained from the survey includes:

- The number of Top 200 funds investing in real estate jumped to 138, and the amount of assets invested in real estate climbed to $16.5 billion, up from $14.9 billion last year.
- The amount of money invested in GICs increased almost $2 billion to $11.7 billion.
- The amount of assets indexed surged to $30.1 billion from $24.4 billion, and the number of funds with indexed assets increased to 53 from 45.
- The Top 200 funds had $16 billion invested directly in mortgages and $18.8 billion in mortgage-backed securities.
- Fifty-six of the funds had at least $1.8 billion invested in venture capital and 29 had at least $893 million in oil and gas programs (a number of funds admitted such investments but would not reveal the amounts).
- The number of funds using options increased to 59 from 49 in 1983 and 41 in 1982. The number of funds using financial futures also increased to 40 from 26 in 1983 and 13 in 1982.
- Surprisingly, the amount of assets invested internationally by the 200 largest funds increased only about $1 billion in 1984 and the number of such funds acknowledging such investments remained unchanged at 76.

However, a number of funds known to have international investments declined to acknowledge them and reveal the amount.

The totals of assets invested in these alternative investments are only for the Top 200 pension funds. Many medium-sized funds also have commitments outside of traditional stock and bond investments, but their commitments are not listed in these totals. ■

Top 200 asset mix 1984 vs. 1983



* mortgage-backed securities included with mortgages in 1983.

Pension Benefit Guaranty assets drop 7%

By Joel Chernoff

WASHINGTON — Assets held by the Pension Benefit Guaranty Corp. dropped 7% in the 12-month period ended Sept. 30, declining to $1.06 billion from $1.14 billion, according to agency estimates.

However, Charles C. Tharp, the PBGC's executive director, noted the figures were unaudited. He said the final figures will be included in President Reagan's budget submission, due Feb. 4.

The lack of any terminations of substantial, underfunded plans partially was responsible for the slight decline in assets, Mr. Tharp confirmed.

When a plan with insuffiecent assets to cover guaranteed benefits is terminated, the agency becomes the plan's trustee and assumes control of its assets.

In addition, investment performance for the PBGC, as for pension plans as a whole, was pretty flat, he indicated.

Another reason for the drop is that the PBGC incurred its first negative cash flow in its 10-year history during 1984.

At the same time, the agency unsuccessfully sought a higher premium paid by single-employer plans. Without the higher premium, the agency risks becoming insolvent in the long run, Mr. Tharp has said.

The agency had gone to bat for an annual premium of $7 per participant compared with the current $2.60. In addition, the PBGC sought reform legislation to close up loopholes in the law that allow employers to dump their pension liabilities on the agency.

However, disagreements about provisions that would boost employer liability and the overall complexity of the proposal spelled its defeat. Other arguments arose over whether employers should share surplus assets from terminated overfunded pension plans with participants.

The PBGC is expected to have a new proposal shortly, with a premium ranging from $7 to $9.

The agency also completed an overhaul of its investment strategy during the year, bringing on new equity and fixed-income managers, as well as adding its first real estate managers.

In July, the agency hired five equity managers, bringing the total to seven. Picked were Chase Investors Management, Dimensional Fund Advisors, McCowan Associates, Rollert & Sullivan and United Capital Management. Retained were Alliance Capital Management and Putnam Advisory Co.

In the fall, the PBGC made its first real estate investments, selecting three closed-end funds to run initial commitments of $60 million. The managers are TCW Realty Advisors, JMB Institutional Realty and The RREEF Funds.

In addition, the PBGC hired Morgan Stanley to advise its $200 million-plus revolving government securities fund.

According to the Sept. 30 estimates, the PBGC had 31.5% of its assets in equities, 35.4% in bonds, 19.6% in cash equivalents 1.4% in real estate and 12% in insurance contracts, receivables and miscellaneous investments.

Index of charts and tables

Profile statistics at a glance ... 32
25 largest pension funds 40
25 largest profit-sharing plans .. 40
25 largest corporate funds 41
25 largest public funds 41
Largest union funds 41
Largest miscellaneous funds 41
Real estate equity 48
GICs 49
Mortgages 55
Mortgage-backed securities 55
International 56
Options 62
Futures 62
Internal management 66
Indexed 74
Dedicated 74
Venture capital 76
Oil and gas 76

Top 200 pension funds/sponsors
(Assets in $ millions)

1.	New York State Common	22,800
2.	General Motors Corp.	22,799
3.	California Public Employees	22,717
4.	AT&T	21,455
5.	New York City Employees	21,154
6.	General Electric Co.	13,338
7.	New York State Teachers	12,826
8.	California State Teachers	12,300
9.	IBM	10,918
10.	Texas Teacher System	9,753
11.	Ford Motor Co.	9,300
12.	New Jersey Investment	9,166
13.	Michigan State Employees	8,951
14.	Wisconsin Investment Board	8,692
15.	Ohio Public Employees	8,584
16.	Ohio Teachers	8,507
17.	E.I. du Pont de Nemours	8,120
18.	North Carolina Retirement	7,967
19.	Exxon Corp.	7,388
20.	Florida State	7,029
21.	Ameritech	7,000
22.	U.S. Steel & Carnegie	6,850
23.	Pennsylvania School Employees	6,597
24.	Bell Atlantic Corp.	6,300
25.	Minnesota Investment Board	5,607
26.	BellSouth Corp.	5,500
27.	Washington Investment Board	5,400
28.	Pacific Telesis Group	5,300
29.	Teamsters, Central States	5,169
30.	Teamsters, Western Conference	5,129
31.	Eastman Kodak	5,103
32.	Boeing Co.	4,948
33.	GTE Service Co.	4,900
34.	Rockwell International	4,900
35.	Sears, Roebuck & Co.	4,808
36.	Georgia State Systems	4,723
37.	United Technologies Corp.	4,631
38.	Shell Oil Co.	4,517
39.	Pennsylvania State Employees	4,453
40.	NYNEX Corp.	4,400
41.	Los Angeles County	4,394
42.	University of California	4,200
43.	Oregon Public Employees	4,200
44.	Colorado Public Employees	4,108
45.	McDonnell Douglas	4,108
46.	Maryland State Systems	4,107
47.	Lockheed Corp.	4,102
48.	Alabama Retirement Systems	4,095
49.	Mobil Oil Corp.	4,000
50.	Illinois Teachers	3,788
51.	Westinghouse Electric	3,650
52.	United Nations Joint Staff	3,610
53.	Southwestern Bell Corp.	3,590
54.	United Air Lines	3,500
55.	Tennessee Consolidated	3,400
56.	Allied Corp.	3,200
57.	Standard Oil Co. (Ind.)	3,144
58.	Arizona State System	3,063
59.	South Carolina Retirement	3,036
60.	Chevron Corp.	3,034
61.	Connecticut Trust Funds	2,979
62.	U S WEST	2,944
63.	Atlantic Richfield Co.	2,840
64.	Prudential Insurance	2,785
65.	United Mine Workers	2,784
66.	Caterpillar Tractor Co.	2,782
67.	Hughes Aircraft Co.	2,722
68.	General Dynamics	2,700
69.	RCA Corp.	2,500
70.	Union Carbide Corp.	2,500
71.	Texas Employees	2,459
72.	Mass. Employees & Teachers	2,400
73.	The LTV Corp.	2,338
74.	Bethlehem Steel Corp.	2,337
75.	Metropolitan Life Insurance	2,325
76.	Gulf Oil Corp.	2,238
77.	Hawaii Employees	2,200
78.	Monsanto Co.	2,200
79.	Chrysler Corp.	2,186
80.	Iowa Public Employees	2,173
81.	Missouri Public School	2,100
82.	Texaco Inc.	2,086
83.	Pacific Gas & Electric	2,068
84.	Phillips Petroleum Co.	2,055
85.	Detroit Retirement Systems	2,021
86.	Illinois Municipal Retirement	1,932
87.	American Airlines	1,912
88.	Procter & Gamble	1,886
89.	Kansas Public Employees	1,870
90.	Trans World Airlines	1,857
91.	Goodyear Tire & Rubber	1,854
92.	Aluminum Co. of America	1,824
93.	Delta Air Lines	1,800
94.	Conoco Inc.	1,800
95.	Tenneco Inc.	1,800
96.	Utah Retirement Fund	1,793
97.	Virginia Retirement	1,793
98.	Mississippi Public	1,773
99.	Grumman Corp.	1,726
100.	J.C. Penney Co.	1,718
101.	Northrop Corp.	1,700
102.	San Francisco City & County	1,700
103.	ITT Corp.	1,683
104.	Alaska State Systems	1,663
105.	Illinois State Board	1,630
106.	Xerox Corp.	1,611
107.	Deere & Co.	1,590
108.	R.J. Reynolds	1,582
109.	Illinois State Universities	1,581
110.	United Methodist	1,578
111.	Ohio Police & Firemen	1,559
112.	General Foods	1,555
113.	Minnesota Mining & Mfg.	1,542
114.	Signal Co.	1,500
115.	Eastern Air Lines	1,500
116.	Kentucky Teachers	1,485
117.	Ohio School Employees	1,484
118.	Sperry Corp.	1,461
119.	Martin Marietta Corp.	1,450
120.	Los Angeles Fire & Police	1,449
121.	Tennessee Valley Authority	1,449
122.	Armco Inc.	1,436
123.	Boilermakers, Blacksmiths	1,420
124.	Dow Chemical	1,400
125.	Owens-Illinois Inc.	1,400
126.	Sun Co.	1,381
127.	Dart & Kraft	1,373
128.	Consolidated Edison	1,359
129.	Aetna Life & Casualty	1,356
130.	Kentucky Retirement	1,356
131.	Chicago Teachers	1,343
132.	Indiana Public Employees	1,338
133.	TRW Inc.	1,336
134.	Southern Baptist	1,300
135.	Southern Co.	1,294
136.	Honeywell Inc.	1,285
137.	National Intergroup	1,280
138.	Marathon Oil Co.	1,271
139.	West Virginia Board of Inv.	1,265
140.	Louisiana State Employees	1,242
141.	Standard Oil Co. (Ohio)	1,240
142.	Nevada Public Employees	1,237
143.	International Harvester	1,227
144.	Commonwealth Edison Co.	1,218
145.	Inland Steel Co.	1,217
146.	Unocal Corp.	1,194
147.	Pan American World Airways	1,193
148.	World Bank	1,189
149.	Southern California Edison	1,175
150.	Citicorp	1,158
151.	Raytheon Co.	1,150
152.	FMC Corp.	1,148
153.	Textron Inc.	1,147
154.	Getty Oil Co.	1,128
155.	Continental Group Inc.	1,119
156.	Travelers Corp.	1,110
157.	New York Life Insurance	1,102
158.	PPG Industries	1,070
159.	L.A. City Employees	1,061
160.	National Rural Electric	1,055
161.	Oklahoma Teachers	1,045
162.	National Hospital & Health Care	1,037
163.	McDermott International	1,037
164.	Intl. Union of Oper. Eng.	1,037
165.	Philip Morris	1,025
166.	International Paper	1,014
167.	Bakery & Confectionary	1,010
168.	L.A. Water & Power	1,000
169.	Bechtel Power Corp.	985
170.	Cigna Corp.	982
171.	Hercules Inc.	965
172.	United Presbyterian Church	965
173.	Firestone Tire & Rubber	964
174.	Southern New England Telephone	930
175.	New Mexico Educational	929
176.	Arkansas Teacher Retirement	924
177.	Motorola Inc.	905
178.	Eli Lilly & Co.	902
179.	Greyhound Corp.	900
180.	Texas Municipal Retirement	900
181.	Chicago Municipal Employees	896
182.	Halliburton Co.	881
183.	John Hancock Mutual Life	873
184.	Florida Power & Light	869
185.	Philadelphia Municipal	860
186.	Texas Instruments	850
187.	Teledyne Inc.	848
188.	Marine Engineers Benefit	840
189.	Episcopal Ministers Church	820
190.	City of Milwaukee	814
191.	Eaton Corp.	813
192.	Texas County & District	803
193.	I.A.M. National	800
194.	Dresser Industries	800
195.	Ashland Oil Inc.	795
196.	K mart Corp.	780
197.	Houston Retirement	774
198.	Indiana State Teachers	773
199.	Army & Air Force Exchange	765
200.	Sandia National Labs.	764
	TOTAL	**641,400**

Ranking of funds/sponsors 201-1,000

Rank	Fund/sponsor	Location	Assets
201.	Merck & Co.	Rahway, N.J.	749
202.	American Can Co.	Greenwich, Conn.	754
203.	Delaware State	Dover	746
204.	North American Philips	New York	743
205.	Abbott Labs	North Chicago, Ill.	740
206.	Batus Inc.	Louisville, Ky.	737
207.	American Cyanamid	Wayne, N.J.	730
208.	Litton Industries	Beverly Hills, Calif.	728
209.	Kaiser Permanente	Oakland, Calif.	725
210.	Amer. Electric Power	Columbus, Ohio	724
211.	Chicago Policemen	Chicago	720
212.	Michigan Municipal	Lansing	720
213.	Colgate-Palmolive Co.	New York	711
214.	Fireman's Fund	Larkspur, Calif.	711
215.	Hewlett Packard Co.	Palo Alto, Calif.	710
216.	Warner-Lambert Co.	Morris Plains, N.J.	709
217.	Idaho PERS	Boise	708
218.	Bristol-Myers Co.	New York	707
219.	American Bar Assoc.	Chicago	705
220.	Dun & Bradstreet	New York	703
221.	Montana Board	Helena	703
222.	Oklahoma PERS	Oklahoma City	699
223.	Arkansas PERS	Little Rock	693
224.	Pacific Lighting Corp.	Los Angeles	693
225.	ILGWU	New York	689
226.	Santa Fe Southern	Chicago	688
227.	Duke Power Co.	Charlotte, N.C.	685
228.	NADA Retirement	McLean, Va.	683
229.	Carpenters, So. Calif.	Los Angeles	681
230.	Texas Utilities	Dallas	680
231.	Rohm & Haas	Philadelphia	680
232.	NCR Corp.	Dayton, Ohio	678
233.	Maine Retirement	Augusta	678
234.	Whirlpool	Benton Hbr., Mich.	675
235.	American Standard	New York	675
236.	Financial Instutions	White Plains, N.Y.	670
237.	Upjohn Co.	Kalamazoo, Mich.	668
238.	S. Calif. Food & Com.	Cypress, Calif.	661
239.	Montgomery Ward	Chicago	660
240.	Colt Industries	New York	660
241.	Olin Corp.	Stamford, Conn.	654
242.	GenCorp.	Akron, Ohio	650
243.	Safeway Stores	Oakland, Calif.	649
244.	Jewel Companies	Chicago	648
245.	Columbia Gas	Wilmington, Del.	647
246.	UFCW Union	Chicago	641
247.	Hallmark Cards	Kansas City, Mo.	640
248.	Scott Paper Co.	Philadelphia	638
249.	Manufacturers Hanover	New York	635
250.	United Telecom	Shawnee, Kan.	635
251.	W.R. Grace	New York	623
252.	Niagara Power	Syracuse, N.Y.	622
253.	B.F. Goodrich	Akron, Ohio	620
254.	Pfizer	New York	616
255.	Ariz. Public Safety	Phoenix	614
256.	United Parcel	Greenwich, Conn.	609
257.	Burroughs Corp.	Detroit	607
258.	Philadelphia Electric	Philadelphia	606
259.	PBGC	Washington	600
260.	McGraw-Edison	Rolling Meadows, Ill.	594
261.	Federated Stores	Cincinnati	590
262.	Consumers Power	Jackson, Mich.	580
263.	Manville Corp.	Denver	576
264.	N.H. Retirement	Concord	576
265.	SmithKline Beckman	Philadelphia	575
266.	Corning Glass	Corning, N.Y.	574
267.	Engineers, So. Calif.	Pasadena, Calif.	570
268.	CIBA-Geigy	Ardsley, N.Y.	570
269.	Boise Cascade	Boise, Idaho	566
270.	S. Dakota Retirement	Pierre	565
271.	YMCA Retirement	New York	565
272.	Borg-Warner	Chicago	564
273.	Weyerhaeuser Co.	Tacoma, Wash.	563
274.	Chicago Transit	Chicago	562
275.	Operating Engrs. #3	San Francisco	561
276.	InterNorth	Omaha, Neb.	560
277.	Burlington Industries	Greensboro, N.C.	559
278.	Northwest Airlines	St. Paul, Minn.	556
279.	Kaiser Aluminum	Oakland, Calif.	555
280.	Hoffmann La Roche	Nutley, N.J.	553
281.	Times Mirror Co.	Los Angeles	552
282.	Brown & Root	Houston	551
283.	Wyoming Retirement	Cheyenne	550
284.	Dana Corp.	Toledo, Ohio	550
285.	Middle South Utilities	New Orleans	549
286.	Georgia-Pacific Corp.	Atlanta	543
287.	Consolidated Nat. Gas	New York	541
288.	Public Serv. E&G	Newark, N.J.	535
289.	Johnson & Johnson	New Brunswick, N.J.	535
290.	Crown Zellerbach	San Francisco	533
291.	Union Pacific Corp.	New York	532
292.	Sheet Metal Workers	Washington	527
293.	General Public Utilities	Parsippany, N.J.	526
294.	Control Data	Minneapolis	525
295.	Westvaco Corp.	New York	523
296.	Carpenters, N. Calif.	San Francisco	521
297.	ARAMCO Serv. Co.	Houston	520
298.	Polaroid Corp.	Cambridge, Mass.	520
299.	Operating Engrs.	Seattle	517
300.	Wayne County System	Detroit	518
301.	Household Int'l.	Prospect Heights, Ill.	516
302.	Ingersoll-Rand Co.	Woodcliff Lake, N.J.	512
303.	Consolidated Rail	Philadelphia	510
304.	Missouri Retirement	Jefferson City	508
305.	AMAX	Greenwich, Conn.	506
306.	San Diego County	San Diego, Calif.	504
307.	Electricians, Emp.	Flushing, N.Y.	500
308.	Central & Southwest	Dallas	500
309.	Combustion Eng.	Stamford, Conn.	498
310.	Detroit Edison	Detroit	494
311.	American Red Cross	Washington	493
312.	Minneapolis Emp.	Minneapolis	485
313.	American Baptist	New York	478
314.	Budd Co.	Troy, Mich.	475
315.	Cook County	Chicago	471
316.	City Investing	New York	469
317.	United Ch. of Christ	New York	467
318.	Campbell Soup	Camden, N.J.	467
319.	Kimberly-Clark Corp.	Neenah, Wis.	466
320.	N. Dakota State	Bismarck	465
321.	American Brands	New York	465
322.	Libbey-Owens-Ford	Toledo, Ohio	463
323.	Singer Co.	Stamford, Conn.	460
324.	Cincinnati Retirement	Cincinnati	457
325.	Beatrice Companies	Chicago	457
326.	Savings Banks	New York	450
327.	State Farm Insurance	Bloomington, Ill.	450
328.	Orange County	Santa Ana, Calif.	450
329.	Cooper Industries	Houston	450
330.	NL Industries	New York	450
331.	Armstrong World Ind.	Lancaster, Pa.	449
332.	IC Industries	Chicago	448
333.	Northeast Utilities	Berlin, Conn.	448
334.	PepsiCo Inc.	Purchase, N.Y.	445
335.	Gulf & Western	New York	440
336.	Kellogg Co.	Battle Creek, Mich.	440
337.	Farmland Industries	Kansas City, Mo.	438
338.	Ethyl Corp.	Richmond, Va.	438
339.	Lutheran Church, Mo.	St. Louis, Mo.	434
340.	Alameda County	Oakland, Calif.	431
341.	Nabisco Brands	Parsippany, N.J.	431
342.	Denver Public School	Denver	431
343.	Northern States Power	Minneapolis	430
344.	Cummins Engine Co.	Columbus, Ind.	429
345.	Blue Cross	Chicago	425
346.	Avco Corp.	Greenwich, Conn.	425
347.	Emhart Corp.	Hartford, Conn.	423
348.	Sherwin-Williams Co.	Cleveland	423
349.	CBS Inc.	New York	420
350.	Mass. Bay Trans.	Boston	420
351.	Schlumberger Ltd.	New York	417
352.	Contra Costa County	Martinez, Calif.	416
353.	E-Systems Inc.	Dallas	415
354.	Winn-Dixie Stores	Jacksonville, Fla.	415
355.	Owens Corning	Toledo, Ohio	415
356.	Laborers, Texas	Dallas	412
357.	St. Regis Paper	New York	410
358.	J.P. Stevens & Co.	New York	410
359.	Clothing & Textile	New York	410
360.	White Consolidated	Cleveland	409
361.	General Mills	Minneapolis	404
362.	Milwaukee County	Milwaukee	403
363.	San Diego City	San Diego	403
364.	Baltimore Gas & Elec.	Baltimore	403
365.	Stauffer Chemical	Westport, Conn.	400
366.	Motion Picture Ind.	Studio City, Calif.	400
367.	Occidental Petroleum	Los Angeles	400
368.	U.S. Air	Washington	399
369.	Norfolk Southern Corp.	Roanoke, Va.	399
370.	Fluor Corp.	Irvine, Calif.	398
371.	Time Inc.	New York	396
372.	San Bernardino City	California	395
373.	Great A&P Tea	Montvale, N.J.	395
374.	El Paso Nat. Gas	El Paso, Texas	394
375.	Teamsters, N. England	Boston	393
376.	Fruehauf Corp.	Detroit	391
377.	Ralston Purina	St. Louis	390
378.	Continental Telecom	Atlanta	387
379.	Pillsbury Co.	Minneapolis	387
380.	Dayton Hudson Corp.	Minneapolis	387
381.	Nebraska State	Lincoln	384
382.	Dallas Retirement	Dallas	384
383.	IBEW	Washington	380
384.	General Signal Corp.	Stamford, Conn.	380
385.	Republic Airlines	Minneapolis	380
386.	Southland Corp.	Dallas	379
387.	Deseret Mutual	Salt Lake City	378
388.	Vermont Retirement	Montpelier	377
389.	Champion Int'l.	Stamford, Conn.	376
390.	Reynolds Metals	Richmond, Va.	375
391.	Air Products	Allentown, Pa.	375
392.	San Jose Retirement	San Jose, Calif.	373
393.	Sacramento County	Sacramento, Calif.	372
394.	U.S. Gypsum Co.	Chicago	365
395.	Coca-Cola Co.	Atlanta	363
396.	Panhandle Eastern	Kansas City, Mo.	358
397.	Cincinnati Bell	Cincinnati	357
398.	Intl. Teamsters	Washington	356
399.	Allis-Chalmers Corp.	Milwaukee	355
400.	Southern Pacific Co.	San Francisco	354
401.	Harris Corp.	Melbourne, Fla.	353
402.	Borden	New York	351
403.	Digital Equipment	Maynard, Mass.	350
404.	Mead Corp.	Dayton	350
405.	CSX Corp.	Richmond.Va.	350
406.	Rhode Island	Providence	350
407.	Quaker Oats Co.	Chicago	349
408.	Cincinnati Milacron	Cincinnati	348
409.	Morton Thiokol	Chicago	348
410.	Teamsters #710	Chicago	344
411.	Allied Stores	New York	343
412.	Marsh & McLennan	New York	342
413.	Nat'l. Food Workers	Washington	340
414.	Masters, Mates, Pilots	New York	340
415.	Peoples Energy Corp.	Chicago	340
416.	Levi Strauss	San Francisco	340
417.	Pennsylvania P&L	Allentown, Pa.	339
418.	Crane Co.	New York	339
419.	Ohio Edison	Akron, Ohio	339
420.	Carpenters, N.Y.C.	New York	337
421.	Ralph M. Parsons	Pasadena, Calif.	336
422.	Arthur D. Little	Cambridge, Mass.	335
423.	Teamsters, Central Pa.	Reading, Pa.	335
424.	Pitney Bowes	Stamford, Conn.	334
425.	Emerson Electric	St. Louis	333
426.	American Lutheran	Minneapolis	330
427.	Allegheny Power	New York	330
428.	Montgomery County	Rockville, Md.	330
429.	R.R. Donnelley & Sons	Chicago	329
430.	Navy Resale	Staten Island, N.Y.	327
431.	Graphic Arts Int'l	Washington	327
432.	Memphis City	Memphis, Tenn.	326
433.	May Dept. Stores	St. Louis	325
434.	Norton Co.	Worcester, Mass.	324
435.	Sundstrand Corp.	Rockford, Ill.	324
436.	Anheuser-Busch	St. Louis	324
437.	Painters, Allied Trades	Washington	324
438.	Gillette Co.	Boston	321
439.	Battelle Institute	Columbus, Ohio	321
440.	Louisiana School	Baton Rouge	320
441.	Ex-Cell-O Corp.	Troy, Mich.	319
442.	Cleveland Electric	Cleveland	318
443.	Rexnord Inc.	Milwaukee	317
444.	Roadway	Akron, Ohio	317
445.	Chicago Fire	Chicago	316
446.	ENSERCH Corp.	Dallas	316
447.	Carpenters 971, 1819	Reno, Nev.	315
448.	Consolidated Foods	Chicago	311
449.	Laborers	Chicago	311
450.	Tektronix	Beaverton, Ore.	310
451.	Burlington Northern	Seattle	310
452.	Kroger Co.	Cincinnati	310
453.	Amer. Hosp. Supply	Evanston, Ill.	310
454.	Piedmont Aviation	Winston-Salem, N.C.	310
455.	New England Electric	Westboro, Mass.	309
456.	De Luxe Check	St. Paul, Minn.	308
457.	Penn Central Corp.	Greenwich, Conn.	307
458.	Interlake Inc.	Oak Brook, Ill.	306
459.	Avon Products	New York	306
460.	Phelps Dodge	New York	305
461.	Schering-Plough Corp.	Madison, N.J.	305
462.	Container Corp.	Chicago	304
463.	Oper. Engrs. #150	Countryside, Ill.	302
464.	ICI Americas	Wilmington, Del.	302
465.	Liberty Mutual	Boston	302
466.	Nat. Distillers & Chem.	New York	301
467.	Elec. Workers #11	Los Angeles	300
468.	Mich. Cons. Gas	Detroit	300
469.	Wis. Electric Power	Milwaukee	299
470.	A.O. Smith	Milwaukee	298
471.	Longshoremen	New York	298
472.	AMF Inc	White Plains, N.Y.	297
473.	Uniroyal Inc.	Middlebury, Conn.	297

Ranking of funds/sponsors 201-1,000

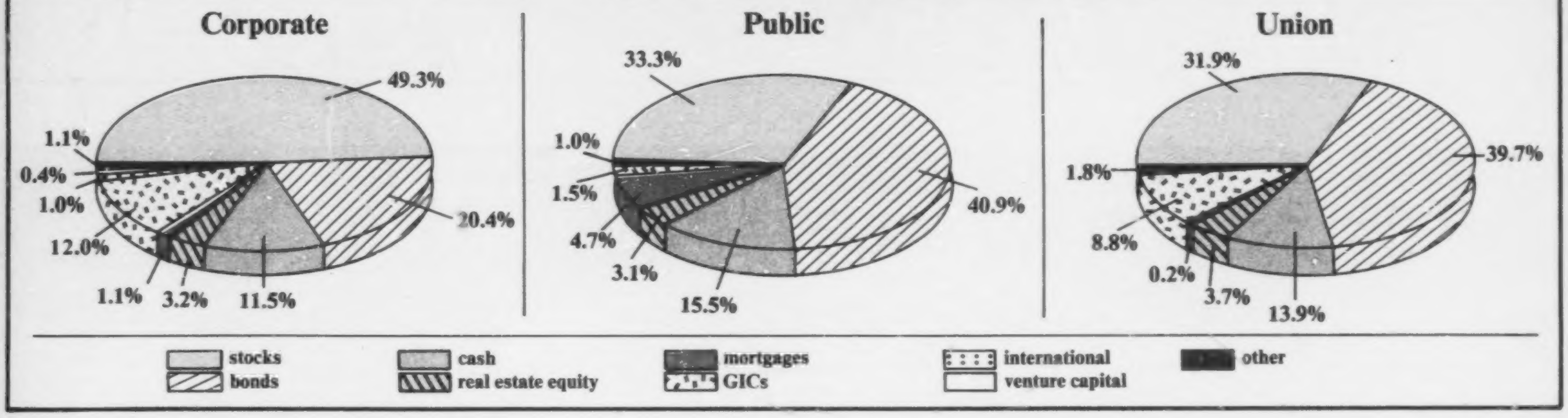
Rank	Fund/sponsor	Location	Assets
474.	National Maritime	New York	294
475.	Amer. Nat. Resources	Detroit	294
476.	Clark Equipment	Buchanan, Mich.	294
477.	Northwest Indus.	Chicago	294
478.	F.W. Woolworth	New York	293
479.	Teamsters #959	Anchorage, Alaska	292
480.	West. Union	U. Saddle River, N.J.	292
481.	Plumbers #30	Los Angeles	291
482.	Pennwalt Corp.	Philadelphia	291
483.	Teamsters #705	Chicago	291
484.	AMP Inc.	Harrisburg, Pa.	290
485.	Fairchild Indus.	Germantown, Md.	290
486.	Mars Inc.	McLean, Va.	290
487.	Houston Industries	Houston	288
488.	Pennzoil	Houston	287
489.	McGraw-Hill	New York	287
490.	Union Electric	St. Louis	287
491.	Longshoremen	San Francisco	287
492.	CPC International	Englewood Cl., N.J.	286
493.	N.Y. State E&G	Ithaca, N.Y.	285
494.	Musicians' Federation	New York	284
495.	Aerospace Corp.	El Segundo, Calif.	283
496.	S.Calif. Laborers	Los Angeles	281
497.	Squibb Corp.	New York	280
498.	Carnation Co.	Los Angeles	280
499.	Allen-Bradley Co.	Milwaukee	279
500.	Cleveland Carpenters	Cleveland	279
501.	Amsted Industries	Chicago	279
502.	Boston City	Boston	278
503.	Baltimore County	Baltimore	278
504.	Briggs & Stratton	Milwaukee	278
505.	Florida Progress Corp.	St. Petersburg, Fla.	278
506.	Stone & Webster	New York	278
507.	Walgreen Co.	Deerfield, Ill.	277
508.	Transco Energy Co.	Houston	277
509.	Screen Actors Guild	Hollywood, Calif.	277
510.	Graphic Arts	Washington	276
511.	ABC	New York	275
512.	ASARCO Inc.	New York	275
513.	BOC Group	Montvale, N.J.	274
514.	H.J. Heinz	Pittsburgh	271
515.	Missouri Employees	Jefferson City	270
516.	Teamsters, W. Pa.	Pittsburgh	270
517.	Texas Eastern	Houston	269
518.	Union Camp	Wayne, N.J.	269
519.	Typographical Union	Colorado Springs	268
520.	Miami City	Miami	268
521.	Amstar Corp.	New York	267
522.	Service Emp., #328	New York	266
523.	ICMA Retirement	Washington	265
524.	Great North. Nekoosa	Stamford, Conn.	265
525.	Inco United States	New York	264
526.	Laborers	Forest Park, Ill.	264
527.	Marriott Corp.	Washington	262
528.	Paper Industry	Nashville, Tenn.	261
529.	American Motors	Southfield, Mich.	260
530.	N.J. Hospital Assoc.	Princeton, N.J.	260
531.	United Cement Workers	Elk Grove Village, Ill.	260
532.	Hormel	Austin, Minn.	258
533.	Jacksonville Employees	Jacksonville, Fla.	258
534.	Seattle Employees	Seattle	257
535.	Continental Air Lines	Houston	256
536.	Sonat	Birmingham, Ala.	254
537.	Northern Illinois Gas	Aurora, Ill.	252
538.	Am. Home Products	New York	252
539.	Belk/Leggett Stores	Charlotte, N.C.	251
540.	Celanese Corp.	New York	250
541.	Western Air Lines	Los Angeles	250
542.	Lever Brothers	New York	250
543.	Cincinnati G&E	Cincinnati	250
544.	Carpenters	Chicago	248
545.	Lumber, Western	Portland, Ore.	248
546.	Savings Bank Emp.	Boston	248
547.	Mercantile Stores	New York	248
548.	Ventura County	Ventura, Calif.	246
549.	Operating Eng., #18	Columbus, Ohio	246
550.	S.Calif. Rapid Transit	Los Angeles	244
551.	Building Trades	Milwaukee	242
552.	Allegheny International	Pittsburgh	242
553.	Hughes Tool Co.	Houston	240
554.	Tribune Co.	Chicago	240
555.	Wheeling-Pittsburgh	Pittsburgh	239
556.	Iron Workers, California	Oakland	239
557.	Kern County	Bakersfield, Calif.	238
558.	Va. Electric & Power	Richmond, Va.	238
559.	N.Y. State Teamsters	Utica, N.Y.	238
560.	Seafarers, Great Lakes	Camp Springs, Md.	237
561.	Baker International	Orange, Calif.	235
562.	Esmark	Chicago	235
563.	San Diego G&E	San Diego	234
564.	McKesson Corp.	San Francisco	234
565.	Laborers, National	Washington	233
566.	AFTRA	New York	232
567.	Carpenters, C.&W. Ind.	Indianapolis	232
568.	Rapid-American Corp.	New York	232
569.	Kerr-McGee	Oklahoma City	230
570.	California Butchers	Oakland, Calif.	230
571.	Gannett Co.	Rochester, N.Y.	230
572.	Arthur Andersen & Co.	Chicago	229
573.	Perkin-Elmer	Norwalk, Conn.	229
574.	Chicago Bridge & Iron	Oak Brook, Ill.	229
575.	MidCon Corp.	Lombard, Ill.	228
576.	Steelcase	Grand Rapids, Mich.	227
577.	Fire and Police	Denver	227
578.	Fort Worth Employees	Fort Worth, Texas	227
579.	GrandMet USA	Montvale, N.J.	226
580.	Blue Bell	Greensboro, N.C.	226
581.	Norton Simon	New York	226
582.	UAW, Dist. 65	New York	225
583.	Akzona Inc.	Asheville, N.C.	225
584.	Carpenter Technology	Reading, Pa.	225
585.	Brunswick Corp.	Skokie, Ill.	225
586.	Maytag Co.	Newton, Iowa	225
587.	Reader's Digest	Pleasantville, N.Y.	225
588.	Inter-Am. Dev. Bank	Washington	224
589.	Anchor Hocking Corp.	Lancaster, Ohio	224
590.	Milliken & Co.	Spartanburg, S.C.	223
591.	Joseph E. Seagram	New York	223
592.	Operating Engrs., #324	Birmingham, Mich.	222
593.	Champion Spark Plug	Toledo, Ohio	222
594.	Colo. Public Service	Denver	222
595.	Fresno County	Fresno, Calif.	221
596.	Carolina Power & Light	Raleigh, N.C.	220
597.	Boston Edison	Boston	220
598.	Minneapolis Teachers	Minneapolis	220
599.	Fairfax County	Fairfax, Va.	220
600.	Miles Laboratories	Elkhart, Ind.	219
601.	Nalco Chemical	Oak Brook, Ill.	219
602.	AMA	Chicago	219
603.	Typographical Union	Chicago	218
604.	Dallas Police and Fire	Dallas	217
605.	Becton Dickinson	Paramus, N.J.	216
606.	Boy Scouts of America	Irving, Texas	215
607.	American Stores Co.	Salt Lake City	215
608.	Graybar Electric Co.	St. Louis	214
609.	GAF Corp.	Wayne, N.J.	214
610.	Flint Employees	Flint, Mich.	213
611.	Centel Corp.	Chicago	213
612.	Rohr Industries	Chula Vista, Calif.	212
613.	Teamsters	Philadelphia	212
614.	R.H. Macy & Co.	New York	211
615.	S.C.Johnson & Son	Racine, Wis.	211
616.	Food Workers, #-55	Atlanta	211
617.	Diamond International	New York	210
618.	Cleveland-Cliffs Iron	Cleveland	210
619.	Int'l Minerals & Chem.	Mundelein, Ill.	210
620.	Ogden Corp.	New York	210
621.	Johnson & Higgins	New York	210
622.	Nat'l Auto. Sprinkler	Silver Spring, Md.	208
623.	Sandoz	East Hanover, N.J.	208
624.	Gates Corp.	Denver	207
625.	STA-ILA	Baltimore, Md.	205
626.	Sterling Drug	New York	205
627.	Memphis Light	Memphis, Tenn.	203
628.	Lear Siegler	Santa Monica, Calif.	201
629.	Northwest Pipeline	Salt Lake City	201
630.	Outboard Marine Corp.	Waukegan, Ill.	201
631.	National Fuel & Gas	Buffalo, N.Y.	200
632.	Johnson Controls	Milwaukee	200
633.	Longshoremen	Houston	200
634.	Alexander & Alexander	Baltimore	200
635.	Joy Manufacturing	Pittsburgh	200
636.	Mellon Bank	Pittsburgh	200
637.	Jim Walter Corp.	Tampa, Fla.	200
638.	United Food Workers	Chicago	199
639.	St. Louis Schools	St. Louis	199
640.	AMFAC Inc.	San Francisco	198
641.	Denver Employees	Denver	198
642.	Printing Pressmen	Los Angeles	197
643.	Gould	Rolling Meadows, Ill.	197
644.	Hartford Employees	Hartford, Conn.	197
645.	Pickands Mather	Cleveland	193
646.	Brooklyn Union Gas	Brooklyn, N.Y.	193
647.	ONEOK Inc.	Tulsa, Okla.	192
648.	Tecumseh Products	Tecumseh, Mich.	191
649.	Washington Gas Light	Washington	190
650.	Food Workers	Los Angeles	189
651.	Phoenix Employees	Phoenix	188
652.	Gerber Products Co.	Fremont, Mich.	188
653.	AMCA International	Hanover, N.H.	187
654.	National Steelworkers	Pittsburgh	187
655.	Mitre Corp.	Bedford, Mass.	187
656.	Detroit Carpenters	Southfield, Mich.	186
657.	United Energy Res.	Houston	185
658.	Diamond Shamrock	Dallas	185
659.	Federal Mogul Corp.	Detroit	185
660.	Nestle	White Plains, N.Y.	185
661.	Coastal Corp.	Houston	184
662.	Zenith	Glenview, Ill.	184
663.	Plumbers, #597	Chicago	184
664.	San Mateo County	Redwood City, Calif.	184
665.	Freeport-McMoran	New York	184
666.	Textile Workers	New York	184
667.	Baton Rouge Emp.	Baton Rouge, La.	184
668.	Agway Inc.	Syracuse, N.Y.	184
669.	N. Ind. Pub. Service	Hammond, Ind.	184
670.	SCM Corp.	New York	183
671.	Rochester G&E	Rochester, N.Y.	183
672.	Arizona Public Service	Phoenix	182
673.	Oakland Munic. Emp.	Oakland, Calif.	182
674.	Humana	Louisville, Ky.	181
675.	Auto Workers, #65	New York	181
676.	Texas Gas Trans.	Owensboro, Ky.	181
677.	Flying Tiger Line	Los Angeles	180
678.	Western Metal Industry	Seattle	180
679.	National Can	Chicago	180
680.	Hershey	Hershey, Pa.	180
681.	Sheet Metal, #108	Los Angeles	180
682.	Int'l Operating Eng.	Washington	178
683.	Publix Super Markets	Lakeland, Fla.	177
684.	Gleason Works	Rochester, N.Y.	176
685.	Sanitary Employees	Chicago	176
686.	National Geographic	Washington	176
687.	Upholsterers Int'l.	Philadelphia	176
688.	Ohio Laborers	Columbus	176
689.	Vulcan Materials Co.	Birmingham, Ala.	176
690.	Sacramento Emp.	Sacramento, Calif.	175
691.	Lone Star Industries	Greenwich, Conn.	175
692.	Food Workers	Madis. Hts., Mich.	175
693.	Lukens	Coatesville, Pa.	174
694.	Mass. Carpenters	Burlington, Mass.	173
695.	EG&G Inc.	Wellesley, Mass.	172
696.	Arkla	Shreveport, La.	171
697.	Nat'l. Telephone Co-op	Washington	170
698.	Hospital Corp. of Amer.	Nashville, Tenn.	170
699.	Potlatch Corp.	San Francisco	170
700.	Springs Industries	Fort Mill, S.C.	170
701.	Caltex Petroleum	Dallas	170
702.	Arlington County	Arlington, Va.	170
703.	Acco Babcock	Fairfield, Conn.	169
704.	Moorman Mfg.	Quincy, Ill.	169
705.	Cessna Aircraft	Wichita, Kan.	169
706.	McDonald's Corp.	Oak Brook, Ill.	168
707.	Commerce Clearing	Chicago	168
708.	First Boston	New York	168
709.	Mo. Highway Emp.	Jefferson City, Mo.	168
710.	Sanders Assoc.	Nashua, N.H.	168
711.	Equifax Inc.	Atlanta	168
712.	Wickes Companies	Santa Monica, Calif.	167
713.	Potomac Electric	Washington	167
714.	Alumax Inc.	San Mateo, Calif.	167
715.	Knight-Ridder	Miami	167
716.	Illinois Tool Works	Chicago	167
717.	Brockway Inc.	Brockway, Pa.	167
718.	Amerada Hess Corp.	New York	166
719.	Illinois Power	Decatur, Ill.	165
720.	Birmingham Emp.	Birmingham, Ala.	165
721.	Pacific Power & Light	Portland, Ore.	165
722.	Cyclops Corp.	Pittsburgh	165
723.	St. Louis Employees	St. Louis	165
724.	Hearst Corp.	New York	165
725.	Baxter Travenol Labs	Deerfield, Ill.	165
726.	Royal Indemnity Co.	New York	164
727.	Columbus/S. Ohio Elec.	Columbus, Ohio	164
728.	Machinists, #9	Bridgeton, Mo.	164
729.	National Industrial	Florham Park, N.J.	163
730.	Pacific Maritime Assoc.	San Francisco	163
731.	Oklahoma G&E	Oklahoma City	163
732.	Automotive Industries	Oakland, Calif.	162
733.	Santa Fe International	Alhambra, Calif.	162
734.	Cameron Iron Works	Houston	162
735.	Cone Mills Corp.	Greensboro, N.C.	162
736.	Sybron Corp.	Rochester, N.Y.	162
737.	Brown Group	St. Louis	162
738.	Salt River Project	Tempe, Ariz.	162
739.	Mobay Chemical Corp.	Pittsburgh	162
740.	Thyssen-Bornemisza	New York	161
741.	Carpenters, W. Wash.	Seattle	161
742.	Frontier Airlines	Denver	161
743.	Square D	Palatine, Ill.	161
744.	Tyler Corp.	Dallas	161
745.	Voluntary Hospital Lge.	New York	160
746.	Daniel International	Greenville, S.C.	160

Ranking of funds/sponsors 201-1,000

Rank	Fund/sponsor	Location	Assets
747.	Electrical Wrkrs. #134	Chicago	160
748.	Texasgulf	Stamford, Conn.	159
749.	Pechiney Corp.	Greenwich, Conn.	158
750.	Park Employees	Chicago	158
751.	Norfolk Employees	Norfolk, Va.	158
752.	Cargill	Minneapolis	158
753.	Williams Companies	Tulsa, Okla.	157
754.	TPF&C	Philadelphia	157
755.	BASF Wyandotte	Parsippany, N.J.	157
756.	Austin Employees	Austin, Texas	157
757.	McKinsey & Co.	New York	156
758.	Armstrong Rubber	New Haven, Conn.	156
759.	Reliance Electric	Cleveland	156
760.	A.C. Nielsen Co.	Northbrook, Ill.	155
761.	Stanley Works	New Britain, Conn.	155
762.	Cultural Institutions	New York	155
763.	Major League Players	New York	155
764.	Interco Inc.	St. Louis	155
765.	Tandy Corp.	Fort Worth	154
766.	Consolidated Papers	Wis. Rapids, Wis.	153
767.	Morrison-Knudsen	Boise, Idaho	153
768.	National Auto Workers	Detroit	153
769.	NVF Co.	Miami Beach	152
770.	Pittston Co.	Greenwich, Conn.	152
771.	Mass. Laborers	Newton, Mass.	152
772.	Hawaiian Electric	Honolulu	152
773.	Tampa Fire & Police	Tampa, Fla.	152
774.	Acme-Cleveland Corp.	Cleveland	150
775.	S'western Public Serv.	Amarillo, Texas	150
776.	Illinois Carpenters	Geneva, Ill.	150
777.	Dravo Corp.	Pittsburgh	150
778.	American Hoechst	Somerville, N.J.	150
779.	Foster Wheeler	Livingston, N.J.	150
780.	American Insurance	New York	149
781.	Graphic Arts	Chicago	149
782.	Capital Holding Corp.	Louisville, Ky.	146
783.	Chubb Corp.	New York	146
784.	Hanna Mining Co.	Cleveland	146
785.	Kansas City P&L	Kansas City, Mo.	145
786.	Alaska Laborers	Seattle	144
787.	Marmon Group	Chicago	144
788.	Ohio Iron Workers	Charleston, W. Va.	143
789.	Greater Cleve. Hospital	Cleveland	143
790.	Thomas J. Lipton	Englewood Cl., N.J.	143
791.	ACF Industries	New York	143
792.	Harsco Corp.	Camp Hill, Pa.	142
793.	Utah Power & Light	Salt Lake City	142
794.	Elec. Workers #1547	Anchorage, Alaska	142
795.	Allegheny Ludlum	Pittsburgh	142
796.	Bricklayers Int'l.	Washington	142
797.	Santa Barbara County	Santa Barbara, Calif.	141
798.	National Gypsum Co.	Dallas	141
799.	Texas Iron Workers	Houston	140
800.	Foxboro Co.	Foxboro, Mass.	140
801.	Castle & Cooke Inc.	Honolulu	140
802.	Mid-Jersey Truck #701	N. Brunswick, N.J.	140
803.	Phil. Carpenters	Philadelphia	140
804.	Fresno Employees	Fresno, Calif.	139
805.	MAPCO Inc.	Tulsa, Okla.	138
806.	N. Calif. Sheet Metal	Dublin, Calif.	138
807.	Food Workers, #27	Baltimore	136
808.	Leo Burnett Co.	Chicago	136
809.	Anderson, Clayton	Houston	136
810.	Fort Howard Paper	Green Bay, Wis.	135
811.	Curtiss Wright Corp.	Woodridge, N.J.	135
812.	Burroughs Wellcome	Research Tri., N.C.	135
813.	St. Joe Minerals Corp.	New York	134
814.	Atlanta Employees	Atlanta	134
815.	Dayton Power & Light	Dayton, Ohio	134
816.	Beech Aircraft Corp.	Wichita, Kan.	134
817.	Duquesne Light Co.	Pittsburgh	134
818.	E.W. Scripps Co.	Cincinnati	134
819.	Carter Hawley Hale	Los Angeles	133
820.	James River Corp.	Richmond, Va.	133
821.	Atlantic City Electric	Pleasantville, N.J.	133
822.	Ark. State Highway	Little Rock, Ark.	133
823.	Delmarva P&L	Wilmington, Del.	133
824.	Associated Dry Goods	New York	133
825.	Western Greyhound	Phoenix, Ariz.	133
826.	St. Paul Teachers	St. Paul, Minn.	133
827.	Retail Clerks	Atlanta	133
828.	Commercial Credit	Baltimore	132
829.	Marine Engineers, #2	Brooklyn, N.Y.	132
830.	SKF Industries	King of Prussia, Pa.	132
831.	New York Times Co.	New York	132
832.	Auto Mechanics, #701	Chicago	132
833.	Food Workers, #174	New York	132
834.	Loews Corp.	New York	132
835.	Peabody Holding Co.	St. Louis	131
836.	Clevepak Corp.	Purchase, N.Y.	131
837.	La. Land & Exploration	New Orleans	130
838.	W. Pa. Carpenters	Pittsburgh	130
839.	Alco Standard Corp.	Valley Forge, Pa.	130
840.	Marin County Emp.	San Rafael, Calif.	130
841.	Oakland County Emp.	Pontiac, Mich.	130
842.	Wang Laboratories	Lowell, Mass.	130
843.	A.B. Dick Co.	Chicago	130
844.	Auto Club of S. Calif.	Los Angeles	130
845.	N. Calif. Laborers	San Francisco	128
846.	Wichita Employees	Wichita, Kan.	128
847.	Gulf States Utilities	Beaumont, Texas	127
848.	Hammermill Paper	Erie, Pa.	127
849.	Hiram Walker & Sons	Detroit	127
850.	Blue Cross, Michigan	Detroit	127
851.	No. N.J. Iron Workers	Newark, N.J.	126
852.	Cannon Mills Co.	Kannapolis, N.C.	126
853.	N. Dakota Emp.	Bismarck	126
854.	Peat Marwick Mitchell	New York	126
855.	ARA Services	Philadelphia	125
856.	Weymouth Contrib.	E. Weymouth, Mass.	125
857.	Witco Chemical Corp.	New York	125
858.	Black & Decker	Towson, Md.	125
859.	Laborers, #472, #172	Newark, N.J.	125
860.	El Paso Employees	El Paso, Texas	124
861.	Copperweld Corp.	Pittsburgh	124
862.	Signode Industries	Glenview, Ill.	124
863.	Harnischfeger Corp.	Milwaukee	124
864.	Grand Union Co.	Elmwood Park, N.J.	124
865.	Operating Eng., #825	Newark, N.J.	123
866.	Newmont Mining Corp.	New York	123
867.	W. Pa. Laborers	Pittsburgh	123
868.	W.W. Grainger Inc.	Skokie, Ill.	123
869.	Shelby County	Memphis, Tenn.	123
870.	San Joaquin County	Stockton, Calif.	123
871.	Media General	Richmond, Va.	122
872.	Davy Inc.	Cleveland	122
873.	S. Calif. Plasterers	Los Angeles	122
874.	Reserve Mining Co.	Silver Bay, Minn.	122
875.	Lincoln Electric	Cleveland	122
876.	Adolph Coors Co.	Golden, Colo.	121
877.	Puget Sound P&L	Bellevue, Wash.	121
878.	Arthur Young	New York	121
879.	U.S. Borax	Los Angeles	121
880.	Louisiana-Pacific	Portland, Ore.	120
881.	Longshoremen	New Orleans	120
882.	Molders, Allied Workers	Cincinnati	120
883.	Varian Associates	Palo Alto, Calif.	120
884.	Dennison Mfg.	Waltham, Mass.	120
885.	Wean United	Pittsburgh	119
886.	Wis. Public Service	Green Bay, Wis.	119
887.	Ohio Casualty Group	Hamilton, Ohio	118
888.	St. Louis Police	St. Louis	118
889.	Rochester Telephone	Rochester, N.Y.	118
890.	Richardson-Vicks	Wilton, Conn.	117
891.	Dow Jones	Princeton, N.J.	117
892.	Yellow Freight	Overland Park, Kan.	117
893.	Reliance Group	New York	117
894.	Bell & Howell	Chicago	117
895.	St. Louis Firemen	St. Louis	116
896.	Barnes Group	Bristol, Conn.	116
897.	Indiana Public Service	Plainfield, Ind.	116
898.	N'western Steel & Wire	Sterling, Ill.	116
899.	MCA Inc.	Universal City, Calif.	115
900.	American Petrofina	Dallas	115
901.	Copley Press	La Jolla, Calif.	115
902.	IU International	Philadelphia	115
903.	Screen Extras, Equity	New York	114
904.	PACCAR Inc.	Bellevue, Wash.	114
905.	Revere Copper & Brass	New York	114
906.	Iron Workers, #25	Detroit	114
907.	Stanadyne Inc.	Windsor, Conn.	113
908.	S.C. Electric & Gas	Columbia, S.C.	111
909.	United Services Auto	San Antonio, Texas	111
910.	Laborers, #395	Phoenix	111
911.	Gries Dynacast	New Rochelle, N.Y.	111
912.	William Wrigley Jr.	Chicago	111
913.	Pontiac General Emp.	Pontiac, Mich.	111
914.	Wisconsin Gas	Milwaukee	110
915.	San Antonio Fire/Police	San Antonio, Texas	110
916.	Syntex Corp.	Palo Alto, Calif.	110
917.	N.Y. Stock Exchange	New York	109
918.	Minnegasco Inc.	Minneapolis	109
919.	Amer. Water Works	Haden Heights, N.J.	109
920.	Tacoma Employees	Tacoma, Wash.	109
921.	Bucyrus-Erie Co.	Milwaukee	108
922.	Ampco Pittsburgh Corp.	Boston	108
923.	Ideal Basic Industries	Denver	108
924.	Pennsylvania Municipal	Harrisburg, Pa.	108
925.	Kaiser Steel	Fontana, Calif.	108
926.	Alexander & Baldwin	Honolulu	108
927.	Indianapolis P&L	Indianapolis	108
928.	Kansas City Schools	Kansas City, Mo.	107
929.	Ernst & Whinney	Cleveland	107
930.	YWCA Retirement	New York	107
931.	Retail Clerks, 1105	Seattle	107
932.	Machinists, #289	Seattle	107
933.	Figgie International	Richmond, Va.	107
934.	Nat'l. Football League	New York	107
935.	Machinists, #67	Washington	107
936.	Rubbermaid Inc.	Wooster, Ohio	106
937.	Iron Workers	Seattle	106
938.	Stanislaus County	Modesto, Calif.	106
939.	Grain Processing Corp.	Muscatine, Iowa	106
940.	Arvin Industries	Columbus, Ind.	106
941.	Beneficial Corp.	Wilmington, Del.	106
942.	United Brands Co.	New York	106
943.	PSA Inc.	San Diego	105
944.	Teamsters, #83	Richmond, Va.	105
945.	American International	New York	105
946.	IUE AFL-CIO	Bloomfield, N.J.	105
947.	Capital Cities Comm.	New York	104
948.	United Tech. Auto.	Dearborn, Mich.	104
949.	Commonwealth Energy	Cambridge, Mass.	104
950.	Toledo Edison	Toledo, Ohio	103
951.	Bulova Watch Co.	Flushing, N.Y.	103
952.	Carpenters, #1310	St. Louis	102
953.	Dillon Companies	Hutchinson, Kan.	102
954.	Houston Natural Gas	Houston	102
955.	Tampa Employees	Tampa, Fla.	102
956.	S. Calif. Permanente	Los Angeles	102
957.	Eagle-Picher	Cincinnati	101
958.	Operating Engr. #542	Norristown, Pa.	101
959.	Sheller-Globe Corp.	Toledo, Ohio	101
960.	Scovill	Waterbury, Conn.	101
961.	Combined Insurance	Northbrook, Ill.	100
962.	Lowe's Companies	N. Wilkesboro, N.C.	100
963.	Long Island Lighting	Mineola, N.Y.	100
964.	Laclede Gas Co.	St. Louis	100
965.	Houdaille Industries	Fort Lauderdale, Fla.	100
966.	Masco Corp.	Taylor, Mich.	100
967.	Operating Eng., #15	New York	100
968.	Omaha Public Power	Omaha, Neb.	100
969.	Wal-Mart Stores	Bentonville, Ark.	100
970.	Banco Popular	Hato Rey, P. Rico	100
971.	Parker-Hannifin Corp.	Cleveland, Ohio	99
972.	Federal Express Corp.	Memphis, Tenn.	99
973.	Young & Rubicam Inc.	New York	99
974.	S. Calif. Food Workers	Los Angeles	99
975.	Iron Workers	New York	99
976.	Manitowoc Co.	Manitowoc, Wis.	99
977.	Keystone Consol.	Peoria, Ill.	99
978.	Jack Eckerd Corp.	Clearwater, Fla.	99
979.	Amica Mutual Ins.	Providence, R.I.	99
980.	Allegheny County	Pittsburgh	98
981.	Knoxville Employees	Knoxville, Tenn.	98
982.	Laborers, Mason	New York	98
983.	Plumbers, #638	New York	98
984.	Greenwood Mills	Greenwood, S.C.	97
985.	Teamsters, #330	W. Chicago, Ill.	97
986.	Revlon	New York	97
987.	Teamsters, #282	Elmont, N.Y.	97
988.	Longview Fibre Co.	Longview, Wash.	97
989.	Ladish Co.	Cudahy, Wis.	97
990.	Warner Comm.	New York	97
991.	Andersen Corp.	Bayport, Minn.	97
992.	Sonoco Products Co.	Hartsville, S.C.	96
993.	Laborers, #253	Jacksonville, Ill.	96
994.	Tulare County Emp.	Visalia, Calif.	96
995.	Chesebrough-Ponds	Greenwich, Conn.	96
996.	S. Calif.Retail Clerks	Los Angeles	96
997.	WSSC	Hyattsville, Md.	96
998.	Lubrizol Corp.	Wickliffe, Ohio	95
999.	Woodward Governor	Rockford, Ill.	94
1000.	Consol. Freightways	Palo Alto, Calif.	94

On the following pages, *Pensions & Investment Age* presents sketches of the nation's 200 largest pension funds. Included is a listing of their money managers, the allocation of their assets, names of their key investment personnel and highlights of news events at each pension fund during the past year.

Asset mix for the bottom 800 — 1984



TIAA-CREF has nation's largest asset pool

NEW YORK — The Teachers Insurance and Annuity Association-College Retirement Equities Fund, which has assets totaling $34.5 billion, actually is the nation's largest pension fund.

The TIAA-CREF plan earned that distinction when American Telephone & Telegraph Co. formed seven operating companies, each of which received billions of dollars in pension assets.

However, TIAA-CREF's assets have not been included in this year's pension fund statistics because it previously regarded itself as a money management organization, rather than a pension fund, and was profiled in the Investment Adviser Directory issue April 30, 1984.

TIAA-CREF not only provides a nationwide pension system for higher education, but also functions as the investment manager for those funds.

The institution was the focus of several important developments during 1984.

Early in the year, the 2nd U.S. Circuit Court of Appeals ruled benefits must be sex-neutral for TIAA-CREF participants retiring after May 1, 1980. The decision forced the fund to rejuggle retirement benefits, reducing payments for men and increasing payments for women. The fund already had such a policy in place but it was retroactive to Aug. 1, 1983.

In the summer of last year, an ad hoc committee created by the National Association of College and University Business Officers issued a report criticizing the fund for failing to respond to market changes. It faulted the fund for not offering alternative investment vehicles and for prohibiting transfers of assets from TIAA to other funds.

TIAA-CREF officials responded by saying they already were in the process of making some changes and were reviewing others suggested by the committee.

During the year, J. Daniel Lee, who had headed TIAA's security division since 1983, was promoted to head TIAA, the fixed-income portion of the fund, in July. In the first days of 1985, he was promoted to executive vice president. David B. Bullett succeeded him as head of the securities division in July and later was named senior vice president.

The asset mix for the fund was 46% stocks, 26% bonds, 1.8% cash equivalents, 3% real estate and 23.2% mortgages.

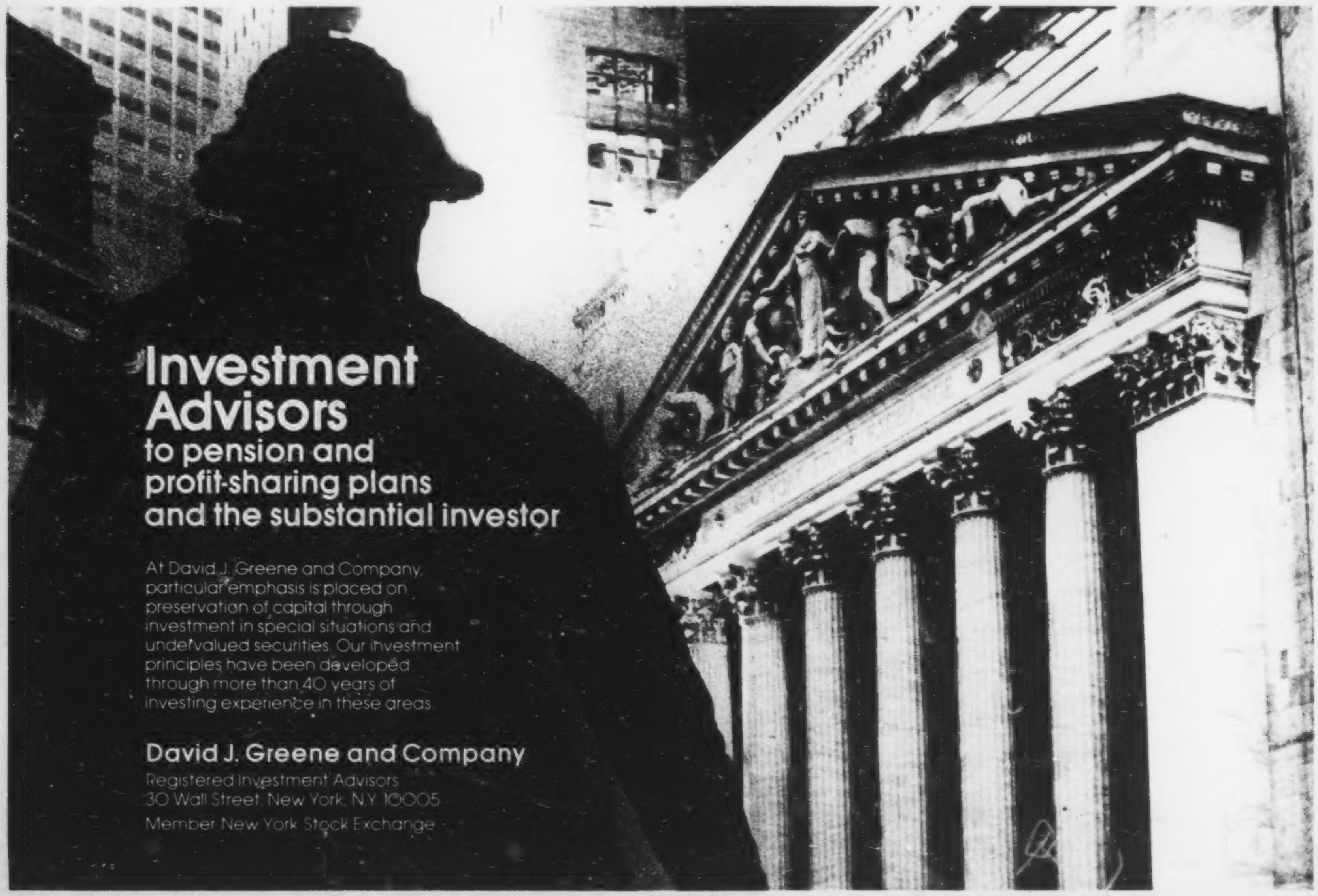
Of the $15.3 billion in the equity fund, $10 billion is in index funds. The fund has invested $1.5 billion overseas in equities and $51 million in fixed income. The fund also has $30 million invested in oil and gas holdings.

Real estate holdings are $1 billion in real estate equity and $7.7 billion in mortgages.

Bankers Trust and Chase Manhattan are the custodians for the College Retirement Equities Fund; Citibank is the custodian for Teachers Insurance and Annuity Association.

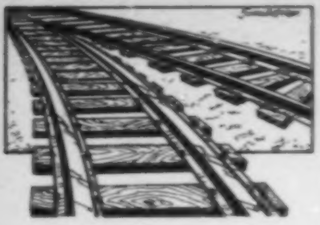
Contributions to TIAA-CREF totaled $2.3 billion in 1984 and benefit payments totaled $550 million.

The key personnel are Mr. Lee; James S. Martin, executive vice president, CREF investments; and Henry A. Frantzen, senior vice president, CREF international investments. ■


Investment Advisors
to pension and profit-sharing plans and the substantial investor

At David J. Greene and Company, particular emphasis is placed on preservation of capital through investment in special situations and undervalued securities. Our investment principles have been developed through more than 40 years of investing experience in these areas.

David J. Greene and Company
Registered Investment Advisors
30 Wall Street, New York, N.Y. 10005
Member New York Stock Exchange



a

Aetna Life & Casualty

	($ millions)
Total assets	1,356
Pension	988
Profit-sharing	0
Thrift or savings	368
Employer contributions	na
Benefit payments	na

HARTFORD, Conn. — Employee benefit funds were $1.34 billion as of Sept. 30, an increase of 6.7% of the $1,271 billion reported as of Sept. 30, 1983.

All of the funds are managed internally.

The approximate asset mix of the funds is 36% stocks, 5.3% bonds, 28.3% cash equivalents; 4.5% real estate equity, 1.1% mortgages and 24.8% general account assets and other long term holdings.

The fund has $41 million invested in equities overseas. It also has $61 million in real estate and $14.5 million in mortgages.

Connecticut National Bank is the master trustee.

Key personnel at the fund are Donald Conrad, executive vice president; and John Lang, vice president and treasurer.

Retirement Systems of Alabama

	($ millions)
Total assets	4,095
Pension	4,095
Profit-sharing	0
Thrift or savings	0
Employer contributions	205
Benefit payments	191

MONTGOMERY, Ala. — The Retirement Systems of Alabama pumped $102 million in privately placed debt financing for a new fleet of Boeing 737 aircraft for Delta Air Lines Inc. in late 1983 and early 1984.

The $4.1 billion fund (book value) also invested more than $600 million in an array of privately placed debt, public bonds, mortgage-backed securities and zero-coupon bonds in late spring, catching yields at peak rates of 14% to 15%.

Alabama also invested $50 million for the debt financing of nearly 1,300 railroad cars built by ACF Industries Inc.

The fund also uses stock options and has $20 million in GICs.

As of Sept. 30, the fund's book value grew 16.8% from the year before, when it had $3.5 billion in pension assets.

The state retirement systems comprise the Teachers Retirement System with $2.79 billion; the Employees Retirement System, $1.27 billion; and the Judicial Retirement Fund, $35 million.

The internally managed fund's asset mix was 4% stocks, 59% bonds, 7.5% cash equivalents, 0.1% real estate equity, 5.9% mortgages, 23% mortgage-backed securities and 0.5% GICs.

Key investment personnel are David G. Bronner, secretary-treasurer; Gary Partridge, chief economist; Cheryl Duke, director of equities; and Hunter Reaves, director of fixed income.

Alaska State Retirement Systems

	($ millions)
Total assets	1,663
Pension	1,663
Profit-sharing	0
Thrift or savings	0
Employer contributions	180
Benefit payments	72

JUNEAU, Alaska — The Alaska State Retirement System named six new managers and a master trustee in 1984.

The management of the fund was reviewed because of a 1982 state law requiring a competitive selection process every three years for all contracted professional services.

The master trustee is First Pennsylvania Bank, Philadelphia, which replaced Bank of America, San Francisco.

New equity managers are INVESCO Capital Management, Lehman Management and Fred Alger Management.

Previously, there were two managers overseeing equity investments. Alliance Capital Management, New York, was rehired but is inactive. Morgan Guaranty Trust, New York, was dropped for equities but its London branch was retained for an international account.

Morgan Guaranty also was hired as a real estate manager, along with JMB Institutional Realty and Security Capital (formerly Smith Barney).

The fund's assets stood at $1.66 billion as of Sept. 30, up 21% from $1.37 billion as of Aug. 31, 1983.

About $1.3 billion is managed in-house, with $1.1 billion in fixed-income and $147.8 million in short-term investments.

A total of $28 million is invested in international equities.

The fund uses fixed-income futures and has $134.3 million invested in real estate equity and $443.2 million in mortgages.

Equity managers: Alger, Alliance, Citicorp, INVESCO, Lehman, Morgan Guaranty and Citicorp.

Real estate managers: Aetna, Equitable, Hancock, Prudential, Security, Morgan Guaranty and JMB.

The fund's asset mix is 42.1% bonds, 24.4% mortgages, 14.3% stocks, 8.9% cash equivalents, 8.1% equity real estate and 2.2% mortgage-backed securities.

James R. Wilson, Kenneth L. Shaffer and Martin W. Lentz are state investment officers.

Profile statistics at a glance

	1984 ($ billions)	1983 ($ billions)
Top 1,000 fund assets	860.1	806.1
Top 200 fund asset	636.8	605.6
Top 100 fund assets	181.8	503.5
Top 50 fund assets	399.6	397.5
Top 25 fund assets	286.1	299.7
Top 200 pension fund assets	570.9	544.1
Top 200 fund statistics	**1984 ($ billions)**	**1983 ($ billions)**
Assets managed in-house	263.8	265.1
Assets indexed	30.1	24.4
Assets invested in equity real estate	15.7	14.9
Assets invested in GICs	11.7	9.9
Assets invested in mortgages	16.0	NA
Assets invested in mtg.-backed securities	18.8	NA
Assets invested overseas	7.7	6.8
Assets in dedicated bond portfolios	17.2	8.6
Contributions	30.2	NA
Benefits paid	27.7	NA
Top 200 fund alternative investments	**1984 No. of sponsors**	**1983 No. of sponsors**
Indexed assets	53	45
Dedicated bond portfolios	39	31
GICs	78	77
Foreign investments	77	76
Real estate	135	113
Mortgage-backed securities	64	NA
Options	59	49
Financial futures	40	26
Venture capital	56	59
Oil and gas	26	29

Allied Corp.

	($ millions)
Total assets	3,200
Pension	2,500
Profit-sharing	0
Thrift or savings	700
Employer contributions	200
Benefit payments	196

MORRISTOWN, N.J. — Allied Corp. reported it had embarked on a stock repurchase program to buy back 5 million shares of its stock in 1984.

The shares were reportedly being purchased for use in the employee stock option and other benefit and compensation plans and were part of an "anti-dilution" effort, according to Treasurer William M. Loftus. Mr. Loftus said the plans required about 3 million shares a year.

Allied's savings plan was combined with Bendix Corp.'s stock purchase and savings plan. State Street Bank and Trust was appointed trustee for all three.

MacKay-Shields was dropped as an equity manager, and the fund discontinued an options overwriting program administered by Balch Hardy & Scheinman. A number of equity managers write covered calls for the fund on a limited basis.

The fund also put money in some venture capital funds and a Morgan Guaranty oil and gas fund.

Total assets of the funds showed no change as of Sept. 30, although the pension fund assets declined to $2.5 billion from $2.6 billion.

The thrift and savings plan assets grew by $100 million to $700 million during the 12-month period ended Sept. 30.

Allied Corp. has $425 million under in-house management. It employs a range of investment alternatives, including real estate equity, international investment, venture capital, index funds and stock options.

GREENSPAN
O'NEIL
ASSOCIATES

is pleased to announce that

Elizabeth A. Griffin
Director, Trading

Timothy S. O'Neil
Director, Volatility Management

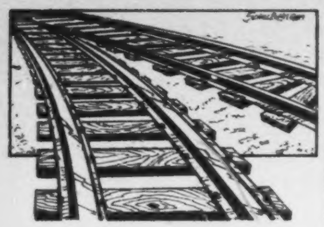
have joined the firm

150 East 52nd Street
New York, New York 10022
212-319-2520

we offer
PRUDENT, QUALITY
REAL ESTATE INVESTMENT
ADVISORY SERVICES
to PENSION AND ENDOWMENT FUNDS

Alex. Brown Realty Advisors, Inc.

Munsey Building, 5th Floor
5-7 North Calvert Street
Baltimore, Maryland 21202
301-727-[illegible]



Equity managers: Batterymarch; BMI Capital; Capital Guardian; Chesapeake Capital; Delaware Investment; Lincoln Capital; Lord, Abbett; Lynch & Mayer; NSR Management, Verus Capital; and Weiss, Peck & Greer.

Bond managers: Morgan Guaranty and Solomon Asset Management.

Real estate managers: Equitable; John Hancock; Prudential; Travelers; and RREEF.

International manager: Kleinwort Benson and Morgan Grenfell.

The approximate asset mix was 53% stocks, 32% bonds, 7% cash equivalents and 8% in real estate equity, including mortgages.

Northern Trust is master trustee.

The key investment officer is Edward Tokar, director-investments.

Aluminum Co. of America

	($ millions)
Total assets	1,824
Pension	1,605
Profit-sharing	0
Thrift or savings	219
Employer contributions	169
Benefit payments	152

PITTSBURGH — Alcoa hired four new equity managers for its $1.8 billion in employee benefits in 1984.

The four new appointees were Franklin Portfolio Associates; Geewax, Terker & Co.; PRIMECAP Management Co.; and Travelers Investment Management Co.

Fayez Sarofim & Co., an equity manager, was dropped in January 1984.

Total employee benefits assets at Alcoa grew by only $8 million to $1,824 million during the 12 months ended Sept. 30, 1984.

Growth in pension fund assets was a little stronger, however. The fund grew $26 million to $1,605 million.

The fund's managers employ a variety of investment management techniques including indexing, stock options, stock index futures, fixed-income futures and international investment.

Equity managers: Fred Alger; Brundage Story and Rose; Capital Guardian; Crocker; Franklin; Frontier Capital Management; Geewax, Terker; Hathaway & Associates; J.P. Morgan & Co.; Pioneering Management Corp.; PRIMECAP; Stralem & Co.; Travelers; and Wells Fargo.

Bond managers: BEA Associates; Fischer, Francis, Trees & Watts; Massachusetts Financial Services; Mellon Bank; and J.P. Morgan.

Real estate managers: Coldwell Banker; Equitable; John Hancock; and RREEF.

GIC managers: Metropolitan and Travelers.

Venture capital managers: Capital Management Services (Sequoia Funds); Dillon Read (Concord Fund); Kohlberg, Kravis & Roberts; and Ventech Partners.

The approximate asset mix was 43% in stocks, 32% in bonds, 14% in cash equivalents; 6% in real estate equity; 1% in mortgages; 2% in mortgage-backed securities; and 2% in GICs.

Mellon Bank is the master trustee.

Key personnel are Joseph C. Pellegrino, assistant treasurer; Richard J. Forster, manager of investments; and Donna S. Barr, pension fund trust coordinator.

American Airlines

	($ millions)
Total assets	1,912
Pension	1,912
Profit-sharing	0
Thrift or savings	0
Employer contributions	100
Benefit payments	100

DALLAS — American Airlines placed added emphasis on its dedicated bond portfolio during 1984, increasing the portfolio's holdings by $100 million to $600 million to cover additional retired lives liabilities.

The restructuring raised the total dedicated portfolio to $600 million. The dedicated bond portfolio is managed internally, along with a $60 million balanced portfolio.

American reshaped its equity management early in 1984 by terminating two equity managers and hiring four. Released were Alliance Capital and Aetna. Hired at American were Atlanta Capital Management; Barrow, Hanley, Mewhinney & Strauss; United Capital Management; and Hotchkis & Wiley. Each received an initial allotment of $40 million.

Also during 1984, American released Oppenheimer Capital as an options manager.

Total assets of the American employee benefit program increased by less than 1% to $1.912 billion between Sept. 30, 1983, and Sept. 30, 1984, while benefit payments climbed 33% and contributions increased 11%.

Equity managers: RepublicBank Dallas; Atlanta Capital; Barrow, Hanley; Bank of Boston; Citicorp; Capital Guardian; Vilas-Fischer; Hotchkis & Wiley; and United Capital.

Balanced managers: Brown Brothers Harriman; Capital Guardian; RepublicBank Dallas; Vilas-Fischer; and Penmark.

International managers: Morgan Grenfell, Rowe Price-Fleming and N.M. Rothschild.

Options manager: Analytic Investments.

Master trustee is RepublicBank Dallas. International custodian is Chase Manhattan.

J.C. Pope is senior vice president and treasurer; William F. Quinn is assistant treasurer.

American Information Technologies Corp.

	($ millions)
Total assets	7,000
Pension	6,400
Profit-sharing	0
Thrift or savings	600
Employer contributions	200
Benefit payments	420

CHICAGO — Ameritech placed $2.4 billion in a dedicated bond fund Dec. 3, the first significant change in its portfolio since its divestiture from American Telephone & Telegraph Co.

Goldman, Sachs did the trading; National Investment Services was hired to manage the dedication.

The asset mix for the pension fund as of Sept. 30 was 65% stocks, 30% bonds and 5% real estate equity.

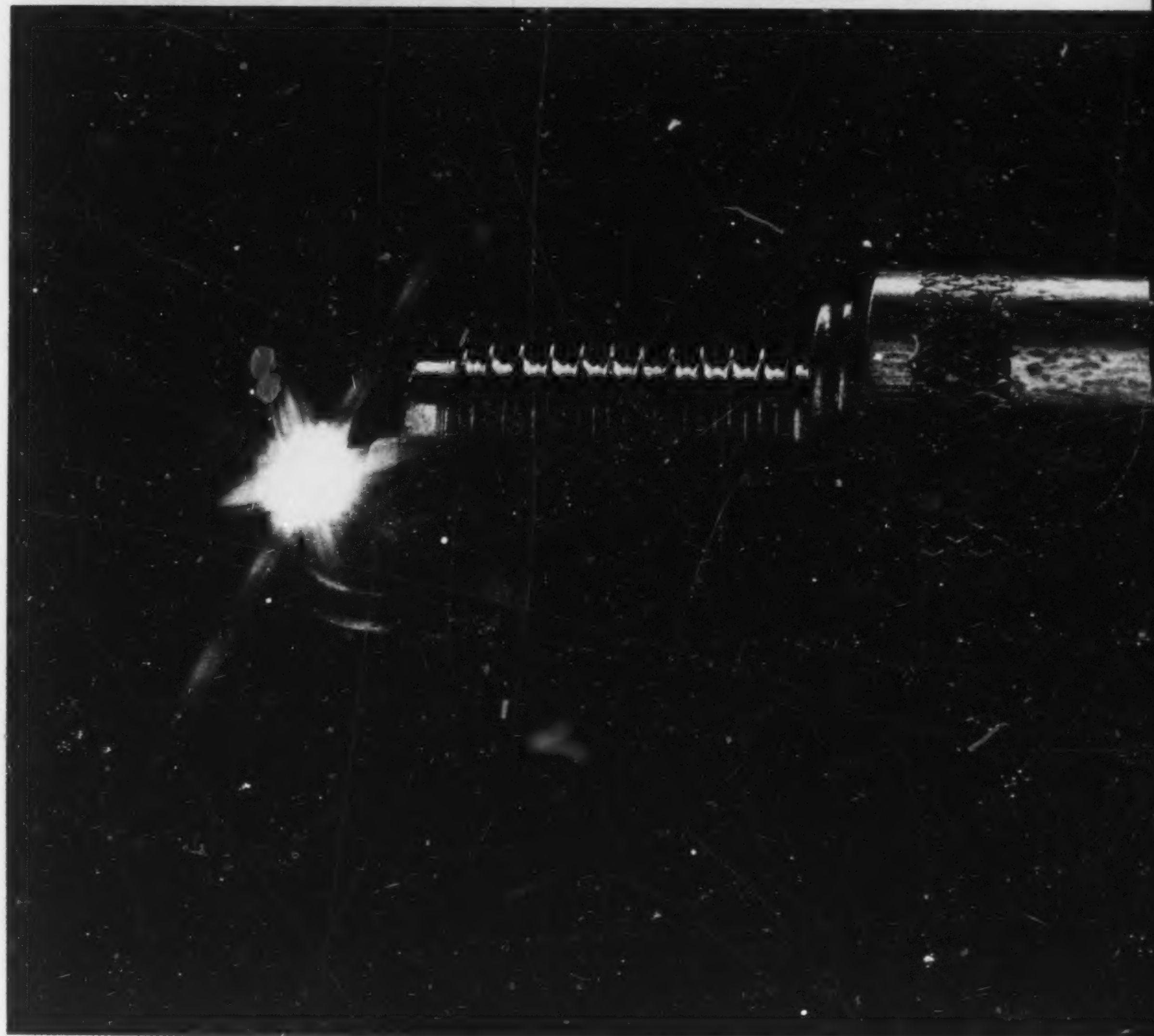
Master trustee for the pension assets is Harris Bank. Master trustee for the savings plan is Bankers Trust.

The fund also has $25 million in venture capital, $600 million in real estate equity, $200 million in an index fund and $100 million in guaranteed investment contracts.

Managers: American Fletcher; Central National Bank; Delaware National Bank; First Wisconsin; Harris; Indiana National Bank; Jennison; Lazard Freres; Lincoln; National Investment Services; Fischer Francis; Scudder; Babson; Bankers Trust; AmeriTrust; Brown; Wells Fargo; Stein Roe; Equitable; First Chicago; Loomis, Sayles; Lord Abbett; Rosenberg Capital; T. Rowe Price; Mathers; National Bank Detroit; and Thorndike.

Key personnel for the fund in-

DRIVING FORCE.



Chessie System Railroads
Seaboard System Railroad
Texas Gas Resources
American Commercial Lines
© 1985 CSX Corporation

The CSX railroads will haul over 380,000 carloads of automobiles, parts and trucks this year. But the real story is how they get the job done—not the big numbers.

Chessie and Seaboard have established specialized teams for specific industries. Certain members of the automotive teams maintain offices in Detroit, where day-to-day contact with manufacturers provides an

clude Donald W. Phillips, director investment management; James A. Kujaca, management investment analysis; and Cheryl A. Becker, manager investment operations.

American Telephone & Telegraph Co.

	($ millions)
Total assets	21,455
Pension	18,000
Profit-sharing	0
Thrift or savings	3,455
Employer contributions	na
Benefit payments	na

NEW YORK — The AT&T pension plan is expected to total $18 billion when the divestiture of the assets of the seven new Bell operating companies spun off from AT&T is complete.

The thrift plan assets are expected to total $3.45 million.

As of Sept. 30, AT&T still managed $41,566 million for the operating companies, representing the amount left after all but Ameritech had received their first cut of the pension assets. The distribution of the assets between AT&T and the seven operating companies will be completed after mid-1985.

AT&T manages $1.6 billion internally, all of it in equities. It had $254 million invested in international markets, $213 million invested in venture capital and $175 million invested in oil and gas programs. Real estate equity investments totaled $1.78 million and mortgage investments totaled $690 million.

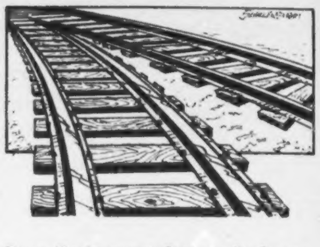
Managers: ABD International; Aldrich, Eastman & Waltch; American Fletcher National Bank; American National Bank; AmeriTrust; Bankers Trust; Bank of New York; Batterymarch; Boston Company Energy Advisers; Boston Company Real Estate; Brown Brothers Harriman; Capital Guardian; Central National Cleveland; Chase Investors Management; Chemical Bank; Citibank; Coldwell Banker; Corporate Property Investors; Crocker National Bank; David Babson; Delaware Investment Advisors; Eastdil; Eberstadt; Equitable; Favia Hill; Fayez Sarofim; Fidelity International; Fidelity Union Bank; Fischer, Francis, Trees & Watts; FNB Atlanta; FNB Chicago; First Wisconsin; G.T. Capital; Goldman, Sachs; Harris Trust; Heitman; IDS; Indiana National Bank; Investment Counselors of Maryland; Intrawest; InterFirst Investment Management; Jennison Associates; John Hancock; Lazard Freres; Lincoln Capital; Loomis, Sayles; Lord Abbett; Manufacturers Hanover Investment; Marine Midland Bank; Mathers; Mellon Bank; Mercantile Trust; Midlantic Bank; Morgan Grenfell; Morgan Guaranty; National Bank of Detroit; National City Bank, Cleveland; National Investment Service of America; North Carolina National Bank; Northern Trust; Pacific Investment Management; Provident Capital; Prudential Insurance; Rosenberg Capital Management; RREEF; Scudder Stevens & Clark; Seattle First National Bank; Standish Ayer & Wood; State Street Bank; State Street Research & Management; Stein Roe & Farnham; T. Rowe Price; Thorndike, Doran, Paine & Lewis; U.S. Trust; Wachovia Bank; Wellington Management; Wells Fargo Investment Advisors.

David Feldman, corporate vice president, and Robert Angelica, director, investment planning and operations, oversee the fund.

Arizona State Retirement System

	($ millions)
Total assets	3,063*
Pension	3,063
Profit-sharing	0
Thrift or savings	0
Employer contributions	127
Benefit payments	165

*as of June 30, 1984



PHOENIX, Ariz. — The Arizona State Retirement System had employee benefit assets of $3.063 billion on June 30, 1984. That is down about 3% from the $3.157 billion reported on June 30, 1983.

The Arizona system dropped Alliance Capital Management in March and hired three balanced managers in April. The new managers are Gardner & Preston Moss, Criterion Capital Management and Wells Fargo Investment Advisors.

The system has $281 million invested in index funds, down from the $340 million reported in 1983. Approximately $300 million is managed internally, all of it in short-term investments. The fund had $219 million in mortgages.

The asset mix as of June 30 was 33% stocks, 46% bonds, 14% cash and 7% mortgages.

Balanced managers: Criterion; Fiduciary Trust; INVESCO Capital; Kemper Financial Services; Wells Fargo; Gardner & Preston Moss.

Equity manager: Bernstein-Macaulay.

Mortgages: Valley National Bank.

Mellon Bank is master custodian.

Max Sullivan is director of the system; Doug Lemon is investment manager.

Arkansas Teacher Retirement System

	($ millions)
Total assets	924
Pension	924
Profit-sharing	0
Thrift or savings	0
Employer contributions	66
Benefit payments	45

LITTLE ROCK, Ark. — The Arkansas Teacher Retirement System pulled back from stocks, dropping its equity component to 30% of assets as of Sept. 30 from 40% the year before. During the same time period, cash equivalents shot up to 20.6% of assets from 12% the year before.

Pension assets rose 11.9% to $924 million as of Sept. 30, from $826 million the year before. Contributions by the state totaled $66 million, while benefit payments were $45 million.

Oppenheimer Capital advises the fund on all investments. Trades are executed internally, as required by state law.

The asset mix was 29.7% stocks; 42% bonds; 20.6% cash equivalents; 4.1% mortgages; and 3.6% mortgage-backed securities.

Hubert Blanchard, director, oversees the fund's investments. Kavolene C. Booth is the assistant director.

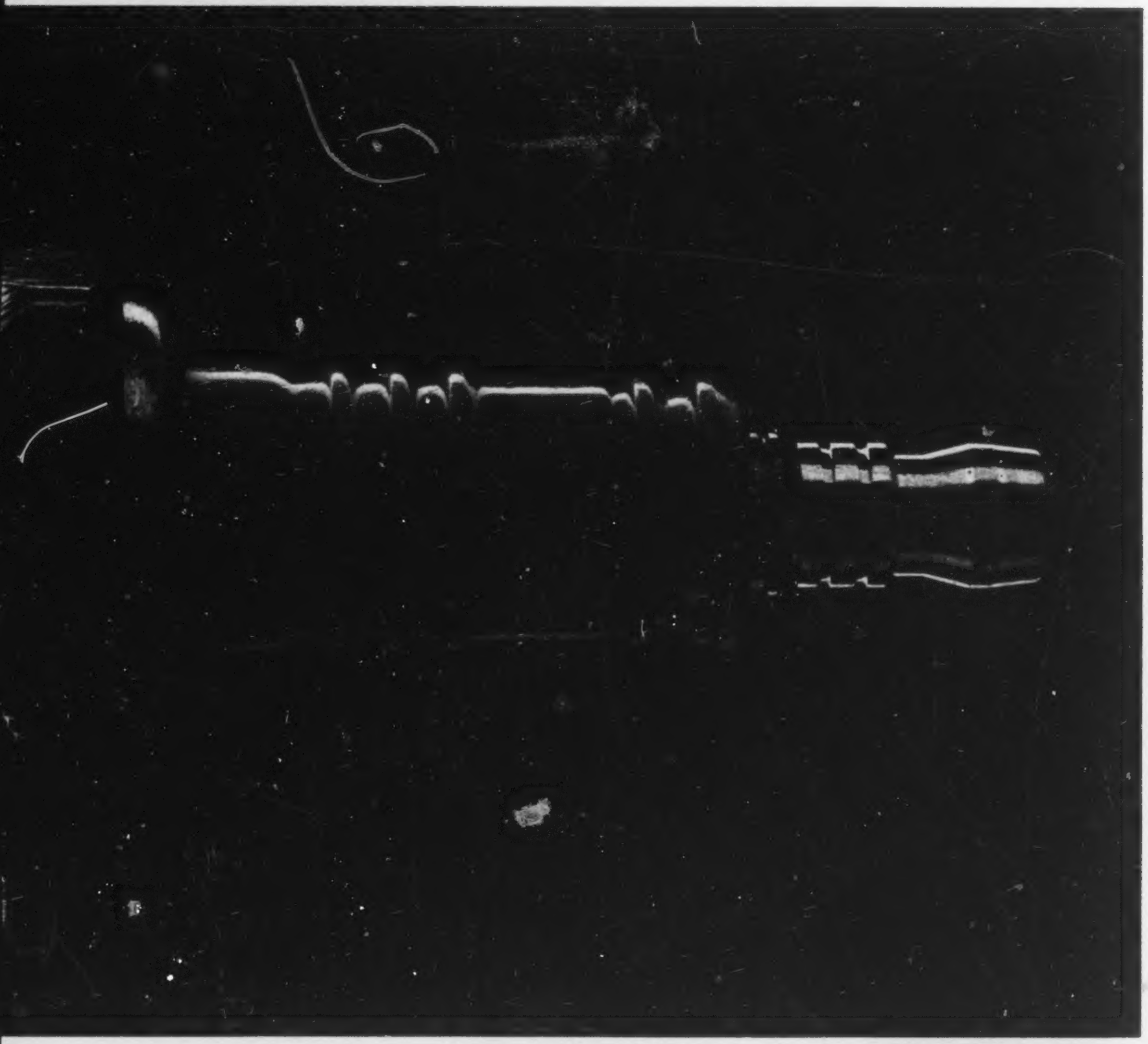
Armco Inc.

	($ millions)
Total assets	1,436
Pension	1,249
Profit-sharing	6
Thrift or savings	181
Employer contributions	124
Benefit payments	152

MIDDLETOWN, Ohio — Wallace B. Askins joined the Armco Inc. pension fund in June as chief financial officer and vice president-corporate finance. He left as chairman and chief executive officer of White Motor Corp.

Total employee assets increased 17.4% to $1,436 million as of Sept. 30, 1984. The asset mix of the pension assets was 46.3% stocks, 31.1% bonds, 5.3% cash equivalents, 15% real estate equity and 2.3% GICs. Armco included 1.8% venture capital and 4.3% in company stock in its

CSX Railroads Help Get The Automobile Industry's Parts To Their Assembly Plants And The Latest Models On The Road.



open line of communication.

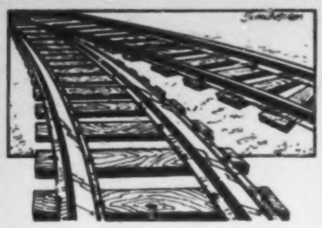
Other members coordinate loading and unloading at facilities strategically located throughout CSX's 21-state territory. These specialists see to it that CSX's large fleet of multi-level rail rack cars is properly serviced and utilized to meet all standards of quality control in handling.

And, to supply both the present and future needs of the industry, CSX's automotive teams' market analysts do in-depth studies of distribution patterns and conduct research that is leading to faster and more efficient ways to get the show and the showroom on the road.

For more information, write to CSX Corporate Communications, P.O. Box C-32222, Department F-3H, Richmond, VA 23261.

CSX CORPORATION

America's
Leading
Transportation
And Natural
Resource
Company.



stock allocation.

Master trustee is Chase Manhattan.

Equity managers: Alliance Capital; Capital Guardian; Chase Investors; Miller Anderson & Sherrerd; and Thorndike Doran.

Bond managers: Equitable.

Real estate managers: RREEF.

Key investment personnel are W.B. Askins and D.F. Furey Jr., general manager.

Army and Air Force Exchange Service

	($ millions)
Total assets	765
Pension	751
Profit-sharing	0
Thrift or savings	14
Employer contributions	72
Benefit payments	43

DALLAS — The Army and Air Force Exchange Service's tax-exempt assets increased almost 9% to $765.3 million on Sept. 30, 1984, from $703 million the previous year.

The fund's manager lineup has not changed through the year.

Equity managers: Aetna, Citicorp, Manufacturers Hanover, Dimensional Fund Advisors and John Hancock.

Bond managers: Robert C. Brown, Citicorp, Hibernia National Bank and Dimensional.

Real estate managers: Aetna and Hancock.

International managers: Morgan Grenfell and Citicorp.

AAFES has GICs invested with Aetna and Hancock.

The fund's asset mix as of Sept. 30 was 58% stocks, 5% bonds, 1% cash, 7% real estate equity, 2% mortgages, 2% GICs and 25% in insurance general accounts.

The fund has $10.5 million in venture capital, $54.1 million in real estate equity and $14.1 million in mortgages. It uses stock options.

Martin Rodman is assistant comptroller-insurance; F.J. Cedeno is assistant chief-insurance; and Louis Bornmann II is systems accountant-insurance.

Ashland Oil Inc.

	($ millions)
Total assets	795
Pension	551
Profit-sharing	7
Thrift or savings	237
Employer contributions	12
Benefit payments	15

RUSSELL, Ky. — Alfred Green, assistant treasurer, was named manager of employee benefit investments for the oil concern last summer.

Total assets of the funds grew by $52 million in the 15-month period ending Sept. 30 a 7.2% growth for the period. Last year, the fund's holdings were estimated as of June 30, 1983.

About $35 million is run in-house, all of it in fixed income; $16 million is invested internationally by an outside manager.

Management techniques include stock options and fixed-income futures.

The company contributed $12 million and paid $15 million in benefits in 1984.

Equity managers: BMI Capital; Bankers Trust; Sanford C. Bernstein; Equitable; Forstmann-Leff; Loomis, Sayles; and Morgan Guaranty.

Bond managers: Lazard International and Pacific Investment Management.

Real estate managers: Aetna; Equitable; and Prudential.

GICs: Aetna; Equitable; Metropolitan Life; New England Life; New York Life; and Prudential.

The asset mix as of Sept. 30 was 39% stocks, 14% bonds, 19% cash equivalents, 4% real estate equity, 3% mortgages, 1% mortgage-backed securities and 20% in GICs.

Key investment personnel are Alfred Green, assistant treasurer; Charles Russell Jr., administrative vice president-finance; and Kim Turkington, investment funds analyst.

Atlantic Richfield Co.

	($ millions)
Total assets	2,840
Pension	2,050
Profit-sharing	0
Thrift or savings	790
Employer contributions	na
Benefit payments	na

LOS ANGELES — Employee benefit assets for Atlantic Richfield increased 14% to $2.84 billion from $2.5 billion for the 12 months ended Sept. 30.

ARCO's $790 million in thrift or savings plan assets includes $220 million in an employee stock ownership plan.

Equity managers: Jennison Associates; G.T. Capital; Fidelity International; Warburg Investment International; Rowe Price-Fleming; and Capital Guardian Trust.

Bond managers: Trust Company of the West; Fiduciary Trust; J.P. Morgan; Salomon Asset Management; Security Pacific Investment; and MacKay-Shields.

Real estate managers: Aldrich Eastman & Waltch; Merrill Lynch Hubbard; Crocker National Bank; and Lehndorff Associates.

Stock-index and fixed-income futures are used, as are stock options. The company did not provide an asset mix.

Key personnel in charge of employee benefit assets are Howard Ockelmann, investment officer; Dan W. Woolley, manager-equity investments; and Paul Martin, bond portfolio manager.

The directory of microcomputer products and services available for treasury management will run March 4.

b

Bakery and Confectionary Union & Industry

	($ millions)
Total assets	1,010*
Pension	1,010
Profit-sharing	0
Thrift or savings	0
Employer contributions	142
Benefit payments	116

* as of May 31, 1984

KENSINGTON, Md. — The Bakery and Confectionary Union & Industry fund hired two balanced managers and dismantled an immunized bond portfolio in 1984. The new balanced managers are Trust Company of the West and Loomis, Sayles. Manufacturers Hanover, which had managed the immunized bond portfolio, was dropped.

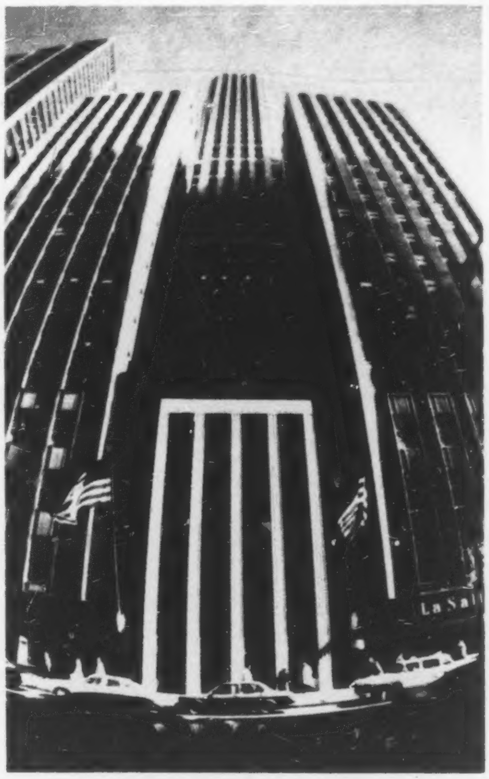
Asset mix of the fund as of Sept. 30 was 31% stocks, 41% bonds, 15% cash equivalents, 3% mortgages and 10% GICs.

Equity managers: Wertheim; Lazard Freres; TCW; Loomis; and Stein, Roe.

Bond managers: TCW; National Savings & Trust; and National Bank of Washington.

Real estate managers: National Bank of Washington.

National Bank of Washington is



135 South LaSalle Building, Chicago, IL

We are pleased to announce the acquisition of eight major commercial, retail and industrial properties valued at over

$600,000,000

on behalf of the

LaSalle Street Fund
Incorporated

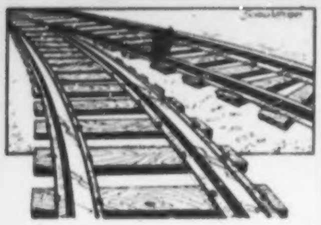
a commingled fund for corporate pension plans, profit sharing trusts, and tax-exempt entities.

<LaSalle Advisors Incorporated purchased this 1.2 million square foot office building on behalf of the LaSalle Street Fund Incorporated. Subsequent to the acquisition, LaSalle Advisors Incorporated has been able to increase rents per square foot and raise the occupancy level.

LASALLE ADVISORS
Incorporated
Registered under The Investment Advisors Act of 1940

11 South LaSalle Street
Chicago, Illinois 60603

A Subsidiary of LaSalle Partners Incorporated



master trustee. John J. Fleming is administrative director.

Bechtel Power Corp.

	($ millions)
Total assets	985
Pension	0
Profit-sharing	985
Thrift or savings	0
Employer contributions	na
Benefit payments	na

SAN FRANCISCO — Bechtel Power Corp.'s combined profit-sharing and thrift plans totaled $985 million as of Sept. 30, which is a roughly 10% increase from $898 million the previous year.

About 15%, or $150 million, of the assets are managed in-house, split evenly between fixed income and cash equivalents.

The company has about $100 million managed internationally. One of its three international managers, Morgan Grenfell Investment Services, is a new hire.

Midyear, Bechtel committed $10 million to a real estate investment trust with Corporate Property Investors.

Officials declined to provide an asset mix.

Equity managers: Batterymarch; Columbia Management; Glickenhaus & Co.; Lynch & Mayer; Sit Investment; and Wells Fargo Investment Advisors.

Bond managers: Pacific Investment Management; T. Rowe Price.

Real estate managers: Aetna; Prudential; First National Bank of Boston; and Equitable.

International managers: G.T. Capital Management, Morgan Guaranty Trust and Morgan Grenfell.

Wells Fargo Bank is master trustee for the plans.

Vincent P. Kuhn Jr., assistant treasurer, oversees the fund.

Bell Atlantic Corp.

	($ millions)
Total assets	6,300
Pension	5,000
Profit-sharing	0
Thrift or savings	1,300
Employer contributions	na
Benefit payments	na

PHILADELPHIA — Bell Atlantic Corp. had $6.3 billion in employee benefits assets as of Sept. 30 — $5 billion in its pension plan and $800 million in a savings plan. The remaining $500 million represents other proprietary funds, which Bell Atlantic declined to comment on.

Only $3 billion in pension assets were directed to the new Bell regional company in 1984 as a result of the divestiture of American Telephone & Telegraph Co. The remaining assets were inherited Jan. 1, 1985.

Bell Atlantic hired Mellon Bank as master trustee during the year. It also conducted an asset allocation study and began evaluating the managers it inherited from AT&T. In line with that review, the new operating company had dropped an unknown number of inherited managers and reportedly hired five new fixed-income managers at the end of 1984.

Reportedly, the new managers are Wentworth, Hauser and Violich; Sovran Bank; Pacific Investment Management; Miller, Anderson & Sherrerd; and Mercantile Trust Co.

The company reported it had $800 million of its assets indexed, $50 million committed to venture capital and $400 million in equity real estate.

The pension plan'sasset mix as of Sept. 30 was 58% stocks, 35% bonds and 7% equity real estate.

Officials would not provide more information on the fund.

Equity managers: Batterymarch; Eberstadt Asset Management (now folded into Alliance Capital Management); Lord, Abbett; Mercantile Safe Deposit; Pioneering Management; Prudential; Thorndike, Doran, Paine & Lewis; and Wellington Management.

Bond managers: Brown Brothers Harriman; Harris Trust; and Putnam Advisory.

Balanced managers: AmeriTrust; Bankers Trust; Equitable; IDS Advisory and State Street Research.

Key Bell Atlantic personnel include J.A. Mountain, vice president and treasurer; E.P. Rennie, director-investments, and J.A. Bobrowski, director-administration, share the responsibility for investments.

BellSouth Corp.

	($ millions)
Total assets	5,500
Pension	5,000
Profit-sharing	0
Thrift or savings	500
Employer contributions	na
Benefit payments	na

ATLANTA — BellSouth is in no hurry to make changes after the divestiture of American Telephone & Telegraph Co., except perhaps in the international area.

At the time of *Pensions & Investment Age's* survey, the asset mix was up in the air because of the divestiture, according to Kincaid Patterson, director-trust assets. BellSouth's pension fund was one of the four new telephone companies that took more than half of its assets Jan. 1, 1984, and will receive the rest in 1985.

BellSouth inherited managers from AT&T.

Managers: AmSouth Bank; Bankers Trust; Batterymarch; Citizens & Southern National Bank of Georgia; First Tennessee Investment Management; NCNB National Bank; and Pacific Investment Management Co.

BellSouth's real estate investments now are composed of the company's share in AT&T's Telephone Real Estate Equity Trust.

Master trustee for the fund is Wachovia Bank & Trust.

Mr. Patterson is the key person overseeing investments.

Bethlehem Steel Corp.

	($ millions)
Total assets	2,337
Pension	2,337
Profit-sharing	0
Thrift or savings	0
Employer contributions	300
Benefit payments	425

BETHLEHEM, Pa. — Bethlehem Steel had total assets of $2.337 billion in its pension fund as of Sept. 30.

Employer contributions for 1984 were estimated at $300 million, and benefits paid to retirees were estimated at $425 million.

All assets are managed in-house. Assets were allocated as follows: 33% stocks, 57% fixed income, 2% short term instruments, and 8% in other types of investments.

Bethlehem dedicated all of its $1.328 billion fixed-income position this past year. The company said it would save about $50 million in annual employer contributions through the dedication.

Reportedly, Salomon Brothers manages the dedicated portfolio.

The company also made its first international investment, committing less than 1% of total assets. It hired Putnam International Advisors of Boston and Morgan Guaranty Trust Co. of London to invest in international equities.

Morgan Guaranty is master trustee for the plan.

Walter W. Buckley Jr. is pension fund manager.

win plan. 15 seconds to spare?

win plan *is what we call our international*
employee benefit concept
that doesn't cost the customer a penny.
And that being so, getting more information
sure won't cost you a thing, either.
Just send us your business card.

winterthur

«Winterthur» Swiss Insurance Company, International Division, Rudolfstrasse 1, P.O. Box 286, CH-8401 Winterthur
Tel.: 0041-52-85 53 43, Telex: 896 785 wias ch, Telefax: 0041-52-22 44 42
«Winterthur» Swiss Insurance Company, U.S. Marketing & Service Unit, 55 East Jackson Boulevard - 12th floor
Chicago, IL 60604, USA, Tel.: 822-4512, Telex: 25 287
IFISCO, International Financial and Insurance Services Company, Yogee Thakkar, Gartenhofstrasse 17
CH-8004 Zurich, Tel.: 0041-1-241 94 41, Telex: 814 081 ifis ch

Boeing Co.

	($ millions)
Total assets	4,948
Pension	3,031
Profit-sharing	310
Thrift or savings	1,616
Employer contributions	187
Benefit payments	112

SEATTLE — Boeing Co. employee benefit assets increased about 12% to $4.9 billion from about $4.4 billion during the 15-month period ended Sept. 30, 1984.

Equity managers: Alliance Capital; Chase Investors; Sit Investment Associates; First Interstate Bank of Washington; IDS Advisory; INVESCO; Cushman Farrell; Capital Guardian; Roseberg Capital Management; Century Capital; Citicorp; and Pringle, Flinn, Elvins & Donahoe.

Bond managers: Robert C. Brown; Seattle First National Bank; W.R. Huff; PIMCO; Morgan Guaranty.

Real estate managers: Security Pacific; Aetna; Prudential; First Chicago.

The benefit system has invested $24 million in venture capital, $340 million in equity real estate and $39 million in mortgages.

As of Sept. 30, the pension asset mix was 48.5% stocks, 22.7% bonds, 13.1% cash and cash equivalents, 10.4% real estate equity, 1.3% mortgages and 4% other.

Chase Manhattan Bank is the master trustee.

Gary Bland, manager trust investments, and Elizabet Marcoux, assistant manager trust investments, are the key investment officers.

Boilermakers, Blacksmiths National Pension Trust

	($ millions)
Total assets	1,420
Pension	1,420
Profit-sharing	0
Thrift or savings	0
Employer contributions	60
Benefit payments	56

KANSAS CITY, Kan. — The $1.42 billion Boilermakers, Iron Shipbuilders, Blacksmiths Forgers and Helpers National Pension Trust invested $5 million each in two real estate funds in 1984.

The fund picked Karsten and Associates' closed-end funds and the open-end developmental properties account managed by Copley Real Estate Advisors.

Managers: Atlanta/Sosnoff; Crocker Investment; Financial Counselors; Lehman Management; Loomis, Sayles; McMorgan; Neuberger & Berman; Prudential Insurance; Scudder, Stevens & Clark; and Trust Co. of the West.

The fund manages about $10 million in short-term investments.

Pension assets grew 5.7% to $1.42 billion as of Sept. 30, from $1.34 billion the year before.

Slightly more than $60 million is in a dedicated bond portfolio, and $120 million is invested in GICs.

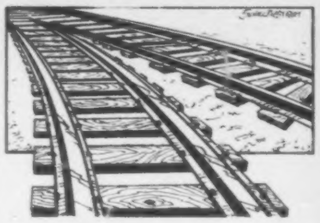
Brotherhood Bank & Trust is the master trustee.

Arthur E. Farr, chairman-investment committee, and T. Lusk Wands, administrator, oversee investment management.

C

California Public Employees' Retirement System

	($ millions)
Total assets	22,717
Pension	22,717
Profit-sharing	0
Thrift or savings	0
Employer contributions	na
Benefit payments	1,200



SACRAMENTO, Calif. — The California Public Employees' Retirement System hired the consulting firm Wilshire Associates in 1984 to do an analysis of the fund's asset allocation, goals and investment performance.

Assets for the fund increased 11% to $22.717 billion from $20.438 billion for the 12 months ended Sept. 30.

All assets are managed in-house, but the retirement system does take equity investment advice from Citicorp Investment Management, and real estate advice from F.I.A. Associates, Equitable Real Estate Investment Management and LaSalle Advisors.

The asset mix as of Sept. 30 was 29.4% stocks, 64.5% bonds, 2.4% cash equivalents and 3.7% real estate equity.

The state treasurer's office serves as custodian. Walton Williams is acting chief of investments.

California State Teachers' Retirement System

	($ millions)
Total assets	12,300
Pension	12,300
Profit-sharing	0
Thrift or savings	0
Employer contributions	548
Benefit payments	850

SACRAMENTO, Calif. — The California State Teachers' Retirement System hired seven bond managers in 1984. It was the first step in finding permanent outside managers for the funds' assets since they were split off from the inhouse management of the California Public Employees' Retirement System in July 1983.

Hired were Loomis, Sayles & Co; Manufacturers Hanover; Scudder, Stevens & Clark; Miller, Anderson & Sherrerd; T. Rowe Price; Stein Roe & Farnham; and Pacific Investment Management Co.

Assets for the retirement system increased 17% to $12.3 billion from $10.5 billion in the 12 months ended Sept. 30.

Equity managers: Alliance Capital and Trust Company of the West.

Real estate for the fund is managed in-house, but the system does have an adviser, Eastdil. The system has $250 million in real estate equity and $750 million in mortgages.

The asset mix for the fund as of Sept. 30 was 24% stocks, 57% bonds, 12% cash and cash equivalents, 0.2% real estate equity and 6.8% mortgages.

The state treasurer's office is the custodian for the system. Richard Lambourne is the fund's chief investment officer.

University of California Retirement System

	($ millions)
Total assets	4,200
Pension	4,200
Profit-sharing	0
Thrift or savings	0
Employer contributions	na
Benefit payments	na

BERKELEY, Calif. — The University of California Retirement System's total assets increased 4.6% for the year ended Sept. 30, to $4.2 billion. Much of the increase came from the use of interest-sensitive stocks used in the university's bond substitute program, which primarily uses utility stocks. The re-

win plan. Three minutes to spare?

The Employee Benefit Concept is called ***win plan.*** **The name doesn't just come out of nowhere: it stands for Winterthur International Network. Because Winterthur operates a world-wide service organization.**

Our specialists are thoroughly familiar with the situations in the various countries: so in the basic concept, important local factors are not simply taken into account but fully integrated.

The *win plan* helps multinationals to standardize employee benefits and provides contractual transparency at extremely competitive retentions.

To customers, the *win plan* creates no additional costs; quite the contrary, it helps them to save. *win's* main feature is a comprehensive correlation of all local insurance plans.

The *win plan* offers the greatest flexibility in arranging your multinational pooling agreement.

There are 7 experience rating systems to choose from ranging from stop-loss, where the network absorbs the risk of overall excess loss, through a loss carryforward system in 5 variations, to what in practice amounts to an elimination of risk charges, where the parent corporation absorbs the overall excess loss risk.

The *win* multinational account provides detailed and full disclosure of all items in ways not otherwise readily available to corporate management, along with the necessary information to keep closer control on the corporation's foreign benefits program.

Such as:

- **changes in personnel membership and turnover throughout the year;**
- **accurate separate claims identification for death, disability, severance, medical and other benefits;**
- **a full breakdown by categories of reserves set up by local insurers, such as reserves for retirement pensions, widows' and orphans' pensions, disability claims, unpaid local dividend reserves, and all other types of reserves.**

If outgo exceeds income Winterthur carries the loss according to the experience rating system chosen by the corporation. On the other hand, if the overall result shows a positive balance, this will be paid to the customer.

Being an all-line insurance carrier, Winterthur is in a position to offer its customers the *win-plan 2:* a pooling arrangement for accident and health insurance. This separate treatment has the additional advantage that any adverse experience on the accident and health pool does not affect the favorable results for life and pension coverages.

Winterthur does business worldwide, **i.e. in all economically important countries. Founded over a hundred years ago, it's a top rank Swiss insurance company and belongs to America's top 50 and Europe's top 10 insurance companies. It's obvious that a strong international presence offers considerable advantages to multinational corporations.**

Winterthur's International Division **is the focal point for international companies and their brokers within the Winterthur Organization managing and coordinating all lines of insurance in all countries.**

Whatever the insurance problems you may be faced with, the International Division has specialists to solve them.

We offer solutions to international insurance problems. Just as others do, too. But we have the special advantage of being located in Switzerland with its

- **political stability**
- **strong financial centers**
- **lack of currency restrictions**
- **comparatively low taxation**

To get more details, just send us your business card.

winterthur

«Winterthur» Swiss Insurance Company, International Division, Rudolfstrasse 1, P.O. Box 286, CH-8401 Winterthur
Tel.: 0041-52-85 53 43, Telex: 896 785 wias ch, Telefax: 0041-52-22 44 42

«Winterthur» Swiss Insurance Company, U. S. Marketing & Service Unit, 55 East Jackson Boulevard - 12th floor
Chicago, IL 60604, USA, Tel.: 822-4512, Telex: 25 287

IFISCO, International Financial and Insurance Services Company, Yogee Thakkar, Gartenhofstrasse 17
CH-8004 Zurich, Tel.: 0041-1-241 94 41, Telex: 814 081 ifis ch

tirement system is entirely managed in house, including its real estate and venture capital investment programs.

As of the end of September 1984, the asset allocation for the fund was 76% stocks, 11.7% bonds, 1.0% cash equivalents, 1.3% mortgages and 10.0% bond substitutes.

The system has $55 million in venture capital and $10.7 million in mortgages. Its custodian is Bank of California.

Key personnel overseeing the investment management are Herbert N. Gordon, treasurer, and Patricia A. Small, associate treasurer.

Caterpillar Tractor Co.

	($ millions)
Total assets	2,782
Pension	2,459
Profit-sharing	284
Thrift or savings	39
Employer contributions	na
Benefit payments	na

PEORIA, Ill. — Caterpillar Tractor Co. hired Baring International as an international equity and bond manager in 1984. The firm has $112 million in international assets with the bulk of that, $84.6 million, in equities.

Its tax-exempt assets grew 1%, to $2.78 billion on Sept. 30, 1984, from $2.75 billion on Sept. 30, 1983.

Equity managers: Institutional Capital; Jennison Associates; Morgan Guaranty Trust; Oppenheimer Capital; State Street Research Management; Thorndike, Doran, Pain & Lewis; and Equitable.

Bond managers: Fischer, Francis, Trees & Watts; Jennison; and Morgan Guaranty.

Real estate managers: Aetna; FNB Chicago; LaSalle Street Fund; Travelers Insurance; and Equitable.

International manager: Baring.

Northern Trust Co. is master trustee.

Caterpillar also has $9.7 million invested in oil and gas and $180.5 million in real estate equity.

The asset mix of the pension assets as of Sept. 30 was 54% stocks, 23% bonds, 16% cash and 7% real estate equity.

F.V. Dickinson is manager of risk management and employee benefit funds; Virginia Kane is benefit funds coordinator.

25 largest profit sharing plans
($ millions)

Rank	Fund	Assets
1.	Sears, Roebuck & Co.	$ 3,259
2.	Procter & Gamble	1,874
3.	Chevron Corp.	1,461
4.	Xerox Corp.	1,210
5.	Lockheed Corp.	1,143
6.	Bechtel Power Corp.	985
7.	J.C. Penney Co.	981
8.	Eastman Kodak	847
9.	Halliburton Co.	842
10.	Motorola Inc.	632
11.	Northrop Corp.	590
12.	Unocal	379
13.	Standard Oil Co. (Ohio)	334
14.	Philip Morris Inc.	310
15.	Boeing Co.	301
16.	Texas Instruments	300
17.	Caterpillar Tractor Co.	284
18.	Shell Oil Co.	200
19.	The LTV Corp.	183
20.	Dart & Kraft Inc.	173
21.	Citicorp	166
22.	John Hancock Mutual Life Insurance Co.	117
23.	CIGNA Corp.	116
24.	Florida Power & Light Co.	116
25.	Dow Chemical Co.	100
TOTAL		$18,903

Chevron Corp.

	($ millions)
Total assets	3,034
Pension	1,350
Profit-sharing	1,461
Thrift or savings	223
Employer contributions	198
Benefit payments	155

SAN FRANCISCO — Chevron Corp. hired Pacific Investment Management Corp. in 1984 as a bond manager, and permitted some of the assets to be used in the manager's fixed-income futures program.

The company, which had a 1.6% increase in total employee benefit assets for the year ended Sept. 30, to $3.034 billion from $2.985 billion, also changed its name from Standard Oil Co. of California.

Equity managers: Bankers Trust; Crocker Investment Management; Rosenberg Capital Management; Stralem; Sanford C. Bernstein; Equitable Investment Management; and Provident Investment Counsel.

Bond managers: Pacific Investment Management; Degnan & Gillespie; STW; and Equitable Investment.

Real estate managers: Prudential Property Investment Separate Account; RREEF; Travelers Separate Account R and CREEF.

As of Sept. 30, 44% of the pension assets were in stocks, 17% in bonds, 25% in cash equivalents and 14% in real estate equity.

The fund has $191 million in real estate equity and also uses stock index futures.

Bankers Trust is the master trustee for the assets.

The key person overseeing the investment of assets is Sellers Stough, financial vice president.

Municipal Employees Annuity & Benefit Fund of Chicago

	($ millions)
Total assets	896
Pension	896
Profit-sharing	0
Thrift or savings	0
Employer contributions	63
Benefit payments	82

CHICAGO — The Chicago Municipal Employees Annuity & Benefit Fund allocated $20 million to Citicorp Investment Management Inc. for the fund's first commitment to venture capital.

The fund also made several real estate investments during 1984, including:

- A $47 million, two-year construction loan on a housing project. Trident Investment Management advised the fund on the investment.
- $40 million to a closed-end pooled trust to invest in Illinois real estate. The trust was organized by Trident Investment Management.
- A $51.5 million construction loan for four senior citizen cooperative housing projects, in which it was one of two participants.

Chicago Municipal increased its assets by 49% to $896 million from $602 million in 1983.

The fund has $22 million in a stock index fund, $6 million in foreign fixed income, $26 million in real estate equity, $83 million in mortgages and $222 million in an immunized bond portfolio.

The asset mix is 26% stocks, 53% bonds, 10% cash equivalents, 3% real estate equity and 8% mortgages.

The fund uses stock options in its investment strategy.

Equity managers: Alliance Capital; Trident; and Ariel.

Bond managers: Alliance; Trident; and Bankers Trust.

Real estate managers: Meyer Investment Properties and Aetna.

Continental Bank is the master custodian.

Overseeing investment management for the fund are B.K. Walters, executive director, and Edward Hrzenjack, investment specialist.

25 largest pension plans
($ millions)

Rank	Fund	Assets
1.	New York State Common	$ 22,800
2.	California Public Employees'	22,717
3.	New York Employees	21,154
4.	General Motors Corp.	20,275
5.	AT&T	18,000
6.	New York State Teachers Retirement System	12,826
7.	California State Teachers Retirement System	12,300
8.	IBM Corp.	10,918
9.	General Electric Co.	10,701
10.	Texas Teachers Retirement System	9,753
11.	New Jersey Division of Investment	9,166
12.	Michigan State Employees' Retirement System	8,951
13.	Wisconsin State Board of Investment	8,629
14.	Ohio Public Employees' Retirement System	8,584
15.	Ohio Teachers Retirement System	8,507
16.	Ford Motor Co.	8,100
17.	North Carolina Retirement System	7,967
18.	Florida State Board of Administration	7,029
19.	U.S. Steel & Carnegie Pension Fund	6,850
20.	E.I. du Pont de Nemours & Co. Inc.	6,678
21.	Pennsylvania Public School Employees'	6,597
22.	Ameritech	6,400
23.	Minnesota State Board of Investment	5,607
24.	Washington State Investment Board	5,400
25.	Teamsters, Central States	5,169
TOTAL		$271,078

Chicago Teachers' Retirement Fund

	($ millions)
Total assets	1,343
Pension	1,343
Profit-sharing	0
Thrift or savings	0
Employer contributions	103
Benefit payments	100

CHICAGO — Assets of the Public School Teachers' Pension and Retirement Fund of Chicago were $1.3 billion Sept. 30, down about 9% from the previous year.

The fund is managed internally, with investment advice from Capital Supervisors.

The approximate asset mix is 60.9% bonds, 31.6% stocks and 7.5% cash equivalents.

A total of $9.4 million, all in fixed income, is invested in foreign markets.

The Chicago city treasurer is master trustee.

Key investment staffers are James F. Ward, executive director, and A. Lee Thurow, president of Capital Supervisors.

Chrysler Corp.

	($ millions)
Total assets	2,186
Pension	1,696
Profit-sharing	0
Thrift or savings	490
Employer contributions	456
Benefit payments	360

DETROIT — Chrysler Corp. undertook a major restructuring of its pension fund in 1984, dropping all its equity managers to set up a $1.1 billion dedicated bond fund, then later cashing out its open-end real estate holdings with John Hancock and Morgan Guaranty.

Most recently, the fund appointed six new managers to run the $1.1 billion dedicated fund it set up last July.

The six managers named were J.P. Morgan Investment Co., Irving Trust, Manufacturers Hanover Trust, Bankers Trust, National Bank of Detroit and Trust Company of the West.

The company will also run about 5% of the dedicated assets in-house.

The fund managers expect the dedicated assets to produce a total return of more than 14%. They also said that the move cut in half Chrysler's unfunded pension fund liability.

In addition to $450 million the fund obtained by dropping its equity managers, the move was funded with $200 million in cash and a $456 million corporate contribution.

In early 1984, Thomas Christian was named Chrysler Corp.'s manager of pension investment, replacing R.K. Alverson, who moved to the group insurance division.

The company's total employee benefit assets grew by about 47% during the 12-month period ended Sept. 30, to about $1.7 billion from about $1.5 billion.

Fixed-income managers: Bankers Trust, Irving Trust, J.P. Morgan, Manufacturers Hanover, National Bank of Detroit and Trust Co. of the West.

Real estate managers: Eastdil, JMB, Prudential and RREEF.

The approximate asset mix of the pension fund was 60% in bonds, 25% in mortgage-backed securities, 10% in cash equivalents and 5% in real estate equity.

Key personnel are Fred Zuckerman, treasurer; Joseph Arpin, assistant treasurer; and Russell P. Flynn, manager of pension fund administration.

CIGNA Corp.

	($ millions)
Total assets	982
Pension	778
Profit-sharing	116
Thrift or savings	88
Employer contributions	38
Benefit payments	32

HARTFORD, Conn. — CIGNA Corp. reported total employee benefits of $982 million as of Sept. 30,

MH INVESTMENT COUNSEL
The Financial Source℠
for Investment Counseling

Atlanta (404) 659-3810
Chicago* (312) 444-1900
Dallas* (214) 748-4766
Los Angeles (213) 489-5770
Philadelphia (215) 567-2890
Phoenix (602) 264-2157
San Francisco (415) 954-9584

℠MH Investment Counsel, Inc.

of which $778 million was in pension assets, $116 million in profit-sharing assets and $88 million in a thrift or savings plan.

This is a 10% increase from the $892 million *Pensions & Investment Age* estimated the fund had in 1983.

All of the firm's benefit assets are managed internally by CIGNA Investment Management Co. and CIGNA Capital Advisers Inc.

The company had $10 million invested internationally, of which $4 million was in equities and $6 million in fixed income.

In real estate, it had $29 million in equity and $70 million in mortgages.

The approximate asset mix as of Sept. 30 was 42% stocks, 17% bonds, 1% cash, 4% real estate equity, 9% mortgages and 27% in the general account.

The master trustee is CG Trust.

John K. Armstrong and George Trumbull, both executive vice presidents, are the key investment personnel.

Citicorp

	($ millions)
Total assets	1,158*
Pension	992
Profit-sharing	166
Thrift or savings	0
Employer contributions	91
Benefit payments	na

*P&I Age estimate

NEW YORK — The total employee benefit assets at Citicorp grew 7% in the year ended Sept. 30, 1984, to $1.2 billion from $1 billion a year earlier. Estimates of the amount of assets in the pension and profit-sharing plans were made by *Pensions & Investment Age*.

All of the pension and profit-sharing assets are managed internally. More than $50 million is believed to be invested internationally and almost $50 million in real estate.

Howard Laeir is the chairman of the staff benefits committee and retired vice chairman of Citicorp.

Public Employees Retirement Association of Colorado

	($ millions)
Total assets	4,108
Pension	4,108
Profit-sharing	0
Thrift or savings	0
Employer contributions	265
Benefit payments	185

DENVER — The Public Employee Retirement Association of Colorado had retirement assets of $4.108 billion as of Sept. 30. That represents an increase of approximately 11.6% from the $3.68 billion reported in 1983.

All assets of the Colorado system are managed internally.

The asset mix of the fund as of Sept. 30 was 29.1% stocks, 35.4% bonds, 19.8% cash, 2.1% real estate equity and 13.6% mortgages. The fund has $90 million invested in GICs and $15 million in venture capital.

Norman Jaskol is assistant secretary-finance.

Commonwealth Edison

	($ millions)
Total assets	1,218
Pension	1,218
Profit-sharing	0
Thrift or savings	0
Employer contributions	na
Benefit payments	na

CHICAGO — Commonwealth Edison's assets increased 5.6% to $1,218 million as of Sept. 30, 1984, from $1,153 million the previous September. All of the fund's assets are managed internally, with $629 million in equity, $175 million in short-term, $394 million in fixed income and $20 million in other investments.

Asset mix for the fund is 51% stocks, 34% bonds and 15% cash equivalents.

The fund has $1.7 million in oil and gas and $43 million in foreign markets, including $32 million in equity and $11 million in fixed-income investments.

Key personnel are Robert F. Lindner, manager of investments and equity investments manager, and Howard R. Carlson, fixed-income investments manager.

State of Connecticut Trust Funds

	($ millions)
Total assets	2,979
Pension	2,979
Profit-sharing	0
Thrift or savings	0
Employer contributions	323
Benefit payments	275

HARTFORD, Conn. — The $2.979 billion State of Connecticut Retirement System pension fund had a 15% increase in total assets as of Sept. 30, 1984, from the previous year's $2.6 billion.

Employer contributions for 1984 will total $323 million, which represents only a slight change from the previous year's $320 million. In benefits paid out in 1984, there was an 11% increase, to $275 million from $248 million the previous year.

About $1.223 billion is managed in-house, with fixed income totaling $553 million, short-term securities totaling $259 million and other investments, $411 million.

There are no investments in international securities, venture capital or oil and gas partnerships.

Real estate equities account for roughly $248 million, or 8% of total assets, while mortgage-backed securities make up $344 million, or 12% of total assets.

Equity managers: David L. Babson, Bernstein-Macaulay, Capital Guardian Trust, Connecticut Bank & Trust, Connecticut National Bank, CIGNA and Wright Investors' Service.

Bond managers: Scudder, Stevens & Clark; Lehman Management; Loomis, Sayles; and Financial Management Group (Bear Stearns).

Real estate managers: Aetna, CIGNA, Phoenix Mutual and Travelers.

The approximate asset mix on Sept. 30 was 35% stocks, 34% bonds, 9% cash equivalents, 8% real estate equity, 12% in mortgage-backed securities and 2% in GICs.

Connecticut Bank and Trust and Connecticut National Bank are custodians.

Overseeing investment of the fund is Frank P. McDermott, deputy treasurer for investments.

Conoco Inc.

	($ millions)
Total assets	1,800*
Pension	700
Profit-sharing	0
Thrift or savings	1,100
Employer contributions	86
Benefit payments	65

*as of June 30, 1984

WILMINGTON, Del. — The Conoco funds appointed two bond managers and two venture capital managers for the nine-month period ended June 30, 1984.

The two bond appointees were Miller, Anderson & Sherrerd and Solomon Asset Management. The two new venture capital managers were Golder, Thoma, Cressey and Robertson, Colman & Stephens.

With the new appointments, the fund increased its venture capital managers to seven, and its number of venture capital partnerships to 10.

During the same time, the fund terminated a fixed-income account with Fischer, Francis, Trees and Watts.

Total assets of the fund grew by $355 million in the nine-month period to $1.8 billion from $1.445 billion, an increase of almost 25%.

During the period, the fund's trustees also placed a small amount in overseas markets through Batterymarch Financial in Boston, according to Roland Hartman, manager of pensions investments.

It was the second foray into the international arena for the fund, which already had international exposure through Morgan Guaranty Trust.

The fund received new contributions of $86 million and paid out benefits of $65 million.

Equity managers: Fred Alger; BMI Capital; Batterymarch; InterFirst Investment; GAMCO; J.P. Morgan Investment; Value Line; Hambrecht & Quist; Hellman Jordan; Leylegian; and McKenzie Walker and Rogers, Casey Barksdale's Special Equity Group Trust.

Bond managers: Bankers Trust; Miller, Anderson & Sherrerd; J.P. Morgan; and Solomon.

Real estate managers: Morgan Guaranty Trust, InterFirst Bank Dallas, Hancock and Travelers.

Venture capital managers: Excelsior; Hambrecht & Quist; Golder, Thoma, Cressey; Pathfinder Fund; Robertson, Colman & Stephens; Sequoia Fund; and Warburg, Pincus.

International managers: Batterymarch and J.P. Morgan.

The asset mix was approximately 67% in stocks, 11% in bonds, 1% in cash equivalents, 9% in real estate equity, 1% in mortgage-backed securities, 8% in GICs and 3% in venture capital.

U.S. Trust Co. was the master trustee.

Key personnel are Roland Hartman Jr., manager-pension investments; Lucille Jones, coordinator-pension investment; and William Smith, coordinator-pension investment.

Consolidated Edison

	($ millions)
Total assets	1,359
Pension	1,359
Profit-sharing	0
Thrift or savings	0
Employer contributions	64
Benefit payments	72

NEW YORK — Consolidated Edison added First Manhattan as an equity manager and dropped Harris Trust as a bond manager during the year ended Sept. 30, 1984.

Total pension assets increased 7.8%, to $1,359 million from $1,261 million the previous year. Employer contributions dropped 14.7%, to $64 million, and benefit pay-outs increased 10.8% to $72 million.

The approximate asset mix as of Sept. 30 was 49% stocks, 16% fixed income (including bonds, mortgages and mortgage-backed securities), 5% cash equivalents, 9% equity real estate and 21% GICs. Con Ed has $122.3 million invested in offshore markets.

Equity managers: Batterymarch; Favia, Hill; Dreyfus Investment; and First Manhattan.

Balanced managers: Morgan Guaranty, Citibank and FMR Investment Management.

Bond manager: State Street Research & Management.

Real estate manager: JMB Institutional Realty.

GICs: Aetna and Metropolitan Life.

Chase Manhattan Bank is master trustee.

John V. Thornton, vice chairman, and John N. Bell, assistant treasurer, oversee fund investments.

Continental Group Inc.

	($ millions)
Total assets	1,119
Pension	966
Profit-sharing	0
Thrift or savings	153
Employer contributions	na
Benefit payments	na

STAMFORD, Conn. — During

25 largest corporate funds
($ millions)

Rank	Fund	Assets
1.	General Motors Corp.	$ 22,799
2.	AT&T	21,455
3.	General Electric Co.	13,338
4.	IBM Corp.	10,918
5.	Ford Motor Co.	9,300
6.	E.I. du Pont de Nemours	8,120
7.	Exxon Corp	7,388
8.	Ameritech	7,000
9.	U.S. Steel and Carnegie Pension Fund	6,850
10.	Bell Atlantic Corp.	6,300
11.	BellSouth Corp.	5,500
12.	Eastman Kodak	5,103
13.	Boeing Co.	4,948
14.	GTE Service Corp.	4,900
15.	Rockwell International	4,900
16.	Sears, Roebuck & Co.	4,808
17.	United Technologies Corp.	4,631
18.	Shell Oil Co.	4.517
19.	NYNEX	4,400
20.	McDonnell Douglas	4,108
21.	Lockheed Corp.	4,102
22.	Mobil Oil	4,000
23.	Westinghouse Electric Corp.	3,650
24.	Southwestern Bell Corp.	3,590
25.	United Air Lines	3,500
TOTAL		$180,125

25 largest public funds
($ millions)

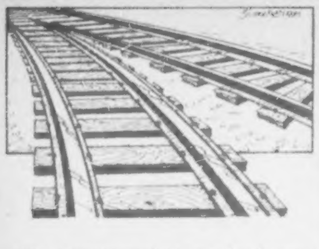
Rank	Fund	Assets
1.	New York State Common Fund	$ 22,800
2.	California Public Employees' Retirement System	22,717
3.	New York City Employees	21,154
4.	New York State Teachers Retirement System	12,826
5.	California State Teachers' Retirement System	12,300
6.	Texas Teachers Retirement System	9,753
7.	New Jersey Division of Investment	9,166
8.	Michigan State Employees Retirement System	8,951
9.	Wisconsin State Board of Investment	8,692
10.	Ohio Public Employees Retirement System	8,584
11.	Ohio Teachers Retirement System	8,507
12.	North Carolina Retirement System	7,967
13.	Florida State Board of Administration	7,029
14.	Pennsylvania School Employees Retirement System	6,597
15.	Minnesota State Board of Investment	5,607
16.	Washington State Investment Board	5,400
17.	Georgia State Retirement Systems	4,723
18.	Pennsylvania State Employees Retirement System	4,453
19.	Los Angeles County Employees'	4,394
20.	Oregon Public Employees Retirement System	4,200
21.	University of California Retirement System	4,200
22.	Colorado Public Employees	4,108
23.	Maryland State Retirement & Pension Systems	4,107
24.	Retirement Systems of Alabama	4,095
25.	Teachers' Retirement System of Illinois	3,788
TOTAL		$216,118

Largest union funds
($ millions)

Rank	Fund	Assets
1.	Teamsters, Central States	$ 5,169
2.	Teamsters, Western Conference	5,129
3.	United Mine Workers of America	2,784
4.	Boilermakers, Blacksmiths National Pension Trust	1,420
5.	Hospital & Health Care Employees	1,037
6.	International Union of Operating Engineers	1,037
7.	Bakery and Confectionary Union & Industry	1,010
8.	Marine Engineers Benefit Association	840
9.	I.A.M. National Pension Fund	800
TOTAL		$19,226

Largest miscellaneous funds
($ millions)

Rank	Fund	Assets
1.	University of California Employees	$ 4,200
2.	United Nations Joint Staff	3,610
3.	United Methodist Pension Fund	1,578
4.	Tennessee Valley Authority	1,449
5.	Southern Baptist Convention	1,300
6.	World Bank	1,189
7.	National Rural Electric Co-op	1,055
8.	United Presbyterian Pension Fund	965
9.	Episcopal Ministers Pension Fund	820
10.	Army & Air Force Exchange	765
TOTAL		$16,931



1984, Continental Group Inc.'s pension fund eliminated its balanced managers, Alliance Capital Management and IDS Advisory.

At the same time, it hired four managers. It hired Bankers Trust to run a $117 million portfolio, shifting between a stock index fund and fixed income at Continental's direction. Continental uses the portfolio to adjust the asset allocation and control pension fund risk.

It hired a second international equity manager, Rowe Price-Fleming, a second bond manager, Fischer Francis Trees & Watts, and a third real estate manager, Northern Trust.

Continental's total employee benefit assets rose 4% to $1.119 billion from $1.075 billion during the year ended Sept. 30.

Of these, $966 million were pension assets, up just less than 2% from the previous year.

The rest of the assets, $153 million, were in a 401(k) plan. They increased 21% in the year.

As of Sept. 30, 1984, the pension asset allocation was: 31% equities, 19% bonds, 10% convertibles, 18% cash equivalents, 13% real estate equities, 0.2% mortgage-backed securities, 8% international equities and 1% venture capital.

Equity managers: Lord Abbett, Continental Financial Services, Jennison Associates, Vilas-Fischer, Bankers Trust.

Bond managers: Continental Financial Services and Fischer Francis.

Convertible manager: Trust Co. of the West Asset Management.

Real estate managers: Equitable, Hancock and Northern Trust.

International equity managers: Morgan Grenfell and Rowe Price-Fleming.

Venture capital manager: Welsh Carson Anderson & Stowe.

The Northern Trust Co. is master trustee for pension assets; Citibank is master trustee for the 401(k).

Walter R. Good is vice president-pension asset management.

d

Dart & Kraft Inc.

	($ millions)
Total assets	1,373
Pension	1,044
Profit-sharing	173
Thrift or savings	156
Employer contributions	22
Benefit payments	74

NORTHBROOK, Ill. — Dart & Kraft's total tax-exempt assets increased 3.5% to $1.373 billion on Sept. 30, 1984, from $1.326 billion a year earlier.

The company is known to be restructuring its pension investments.

Equity managers: Atalanta Capital; E.W. Axe; Batterymarch; BEA; Delaware Investment Advisers; Emerging Growth Partners; Fischer, Francis, Trees & Watts; IDS Advisory; Neuberger & Berman; Putnam Advisory; L.F. Rothschild, Unterberg, Towbin; Ruane, Cuniff; Thorndike, Doran, Paine & Lewis; Vanguard; and Weiss, Peck & Greer.

Bond managers: Fischer, Francis and Bankers Trust.

Dart & Kraft holds insurance-company contracts with John Hancock and New England Mutual. Bankers Trust is master trustee for the defined benefit plans; Northern Trust is master trustee for defined contribution plans.

The amount of assets Dart & Kraft has invested overseas almost tripled to $14.8 million on Sept. 30, 1984, from $5 million in 1983.

The company also has $13.2 million in venture capital, $63.2 million in dedicated or immunized bond funds and $207.5 million in GICs.

The pension fund's asset mix is 47% stocks, 9.5% bonds, 10.5% cash, 0.3% mortgage-backed securities, 15.1% GICs and 17.6% IPGs.

William Preece is director-pension finance, and Karen Smith is trust investment analyst.

Deere & Co.

	($ millions)
Total assets	1,590
Pension	1,590
Profit-sharing	0
Thrift or savings	0
Employer contributions	117
Benefit payments	112

MOLINE, Ill. — Greta Marshall left Deere & Co. at the beginning of 1984 to head BayBanks of Boston's investment division.

Carl Liebscher succeeded her as director of investments.

In early 1984, the company invested $2 million in Plant Resources Venture Fund, a plant biotechnology venture capital fund out of Boston. In September, however, Deere curtailed plans to increase investments in venture capital and real estate because cash flow into the fund was tight.

Deere has $15 million in venture capital and $5 million in equity real estate.

Equity managers: Alliance; J.P. Morgan; Batterymarch; Wright Investors' Service.

Bond managers: Brown Brothers Harriman; J.P. Morgan.

Real estate manager: J.P. Morgan.

Internally run pension assets total just more than $1 billion. Of that, $790 million is invested in equities, $200 million in bonds, $25 million in short-term and $15 million in miscellaneous investments.

Total employee benefit assets increased by $59 million or about 4% in the year through Sept. 30. Deere's indexed assets, however, jumped about 19% to slightly more than $1 billion.

The approximate asset mix of the company's pension fund was 74% stocks, 20% bonds, 5% cash equivalents and 1% real estate.

Boston Safe Deposit & Trust is the master trustee.

Aside from Mr. Liebscher, those overseeing investments are Sam Syverud, manager-investment analysis, and Barron Curtis, portfolio manager.

April 1: Taft-Hartley funds report.

MidCon shows why it can buy and sell gas at a competitive advantage.

The map tells the story.

Our pipelines go where the gas is. And move it to where it's needed.

From the Rockies to Louisiana and the Gulf. From Chicago to Texas and New Mexico. Our 15,000 miles of pipelines are right where you'd want to have pipelines. And that gives us several advantages:

BUY LOW, SELL LOW.

We can shop for gas nearly everywhere gas is found. And *buy* wherever it's cheapest. This allows us to *sell* gas at highly competitive rates and still earn a reasonable margin. Which gives us an advantage in competing for share of market in the new, open markets for gas.

The effect of this advantage is already clear. Our fiscal 1984 earnings were a record $145.5 million, up 20 per cent over last year.

We built our pipeline network through an accelerating acquisition program. The starting point was Natural Gas Pipeline Company of America, one of the lowest-cost pipeline suppliers in the continental U.S. and our largest producer of revenue.

We were a partner in building the Trailblazer Pipeline from the West in 1982, and we acquired Mississippi River Transmission Corporation in 1983.

This year, we became full or joint owners of three more pipeline companies. All told, we've added over 2,900 miles of pipelines since the fall of 1983.

ACQUISITIONS THAT BUILD PROFITS.

Our acquisitions help us in several specific ways. They expand our markets. Improve operating margins. Balance seasonal deliveries.

HOW GEOGRAPHY IMPROVES ECONOMICS.

And achieve economies of scale.

For example, last year we used our network to move over 300 billion cubic feet of gas for other companies. This lowered our unit costs.

We've already made some important acquisitions. But we're still looking for more good opportunities. Especially pipelines that can make the most of low-cost gas and aggressive marketing.

Mississippi River Transmission Corpora-

Delta Air Lines Inc.

	($ millions)
Total assets	1,800
Pension	1,600
Profit-sharing	0
Thrift or savings	200
Employer contributions	na
Benefit payments	na

ATLANTA — Delta Air Lines reportedly hired Morgan Grenfell Investment Services and Globe Finlay in 1984 to run $15 million each in international equities. *Pensions & Investment Age* estimated the airline already had $16.5 million invested internationally as of Sept. 30, 1983.

Managers (according to the 1985 Money Market Directory): McKenzie, Walker; New England Mutual; Travelers; Vanguard.

The airline's total employee benefit assets increased $150 million or almost 10% in the year ended Sept. 30, 1984. During this period, thrift or savings assets grew 33% to $200 million from $150 million.

The pension-fund asset mix as of Sept. 30 was 55% equities, 30% bonds and 15% cash equivalents.

Harris Trust & Savings Bank acts as the company's master trustee.

Delta would not reveal further information.

James Taylor, manager-investment management, and Frank Chew, treasurer, oversee the investment of the company's funds.

Detroit Retirement Systems

	($ millions)
Total assets	2,021*
Pension	2,021
Profit-sharing	0
Thrift or savings	0
Employer contributions	147
Benefit payments	151

*as of June 30, 1984

DETROIT — The Detroit Retirement Systems' fund is made up of the Policemen and Firemen's Retirement System and the General Retirement System.

Pension assets for the police and firemen's system increased 11% to $1 billion from $900 million for the year ended June 30. Pension assets for the general system increased roughly 0.2%, to $1.019 billion from $1.017 billion.

The combined employer contribution for the two funds diminished by 8% to $146 million from $159 million the previous year. Combined pay-out of benefits to retirees increased 12% to $151 million from $135 million.

About $100 million is managed in-house for each of the two funds in short-term cash equivalents.

Equity managers: Oppenheimer Capital and Marquette Capital Management (police and firemen's fund); and Scudder, Stevens & Clark and Comerica Bank-Detroit (general system).

Bond managers: Putnam Advisory (police and firemen's) and Loomis, Sayles (both funds).

Real estate managers: Mellon Bank and Mortgage Investors Group (police and firemen's).

The asset mix of the retirement was 19.8% stocks, 27.9% bonds, 16.7% cash equivalents, 0.5% real estate equity, 9.9% in mortgages, 4.1% in mortgage-backed securities, 19.8% GICs and 1.3% in construction loans.

Neither fund has any international investment.

The police and firemen's plan uses Manufacturer's National Bank of Detroit as master trustee; the general system uses Comerica Bank-Detroit.

Fred Murphy is executive secretary for both funds. Del Berryhill is administrative assistant.

Dow Chemical Co.

	($ millions)
Total assets	1,400
Pension	1,300
Profit-sharing	100
Thrift or savings	0
Employer contributions	105
Benefit payments	98

MIDLAND, Mich. — Dow Chemical Co. had $1.4 billion in employee benefit assets as of Sept. 30, 1984, the same amount reported in 1983.

Equity managers: Alliance; Stein Roe; J.P. Morgan; David L. Babson; AmeriTrust; National Bank of Detroit; Emerging Growth Partners.

Bond manager: J.P. Morgan.

Real estate manager: Coldwell Banker.

International managers: J.P. Morgan; Schroder International.

The company runs $405 million in-house: $225 million in equities, $130 million in fixed income, $5 million in short-term and $45 million in other investments.

Dow has $70 million contingently immunized. It also invests $40 million in international equities, $8 million in venture capital and $5 million in oil and gas.

The approximate asset mix of the fund as of Sept. 30 was 62% stocks, 26% bonds, 5% cash equivalents, 4% equity real estate and 3% GICs. Less than 1% of plan assets is committed to venture capital and oil and gas.

National Bank of Detroit is the plan's master trustee.

Those at the company overseeing investments are E.C. Yehle, director-pension investments; W. Jerry Burroughs, manager-pension investments; B.H. Brooks, portfolio manager; and R.C. Cross, portfolio manager.

Dresser Industries Inc.

	($ millions)
Total assets	800
Pension	880
Profit-sharing	0
Thrift or savings	0
Employer contributions	15
Benefit payments	45

DALLAS — Dresser Industries Inc. purchased $45 million in GICs in 1984, bringing the total invested in the contracts to $300 million. Since 1981, Dresser has placed about one-third of its $800 million pension assets into GICs.

Dresser also committed $7 million to Lehndorff & Babson Real Estate Counsel's first closed-end real estate pool.

Equity managers: David L. Babson; Delaware Investment Ad-

tion is a good example. Within six months after we acquired it, MRT reduced its rates three times. And its 1984 earnings showed an improvement of more than 50 per cent (with a little help from a hard winter).

Not all our pipeline acquisitions have done *that* well, but every one of them contributed to our bottom line in 1984. Even after acquisition costs.

5 STRENGTHS THAT KEEP US FLEXIBLE.

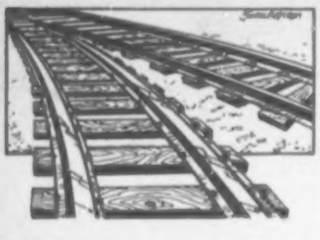
As we look at the Eighties, we see a lot of uncertainty in gas marketing. And a lot of opportunity.

Which is precisely the reason we have structured our company to be ready for anything. In a word, we're *flexible*. And we build that flexibility on five main strengths:

1. Ability to *buy* gas at low cost.
2. Ability to *market* gas at low prices.
3. Strong cash flow.
4. Ability to acquire the right pipeline companies at the right times.
5. Strong, experienced management.

For more information on our plans for the Eighties, contact Kathleen Vuchetich, Manager, Investor Relations, MidCon Corp., 701 E. 22nd Street, P.O. Box 1207, Lombard, IL 60148. Or phone (312) 691-2557.

MIDCON CORP.



visors; Endowment Management and Research; Equitable; Loomis, Sayles; Provident Capital.

Bond managers: Equitable; Morgan Guaranty; U.S. Trust.

Real estate manager: Lehndorff & Babson.

GIC managers: Canada Life; Equitable; Metropolitan; New York Life; Aetna; Hancock; Travelers; Massachusetts Mutual; New England Life; Mutual Benefit Life; Pacific Mutual.

Dresser manages $80 million of its pension assets internally.

The fund's asset mix, as of Sept. 30, is 30% stocks, 10% bonds, 20% cash, 4% real estate and 36% GICs.

P.W. Willey is Dresser's treasurer.

E.I. du Pont de Nemours & Co. Inc.

	($ millions)
Total assets	8,120
Pension	6,678
Profit-sharing	0
Thrift or savings	1,442
Employer contributions	390
Benefit payments	400

WILMINGTON, Del. — The Du Pont pension plan boosted its foreign bond investments by 360% in 1984, raising the total to $612 million from $133 million the year before.

The $6.7 billion fund's international equity component, however, stayed virtually flat, slipping to $272 million from $277 million.

Total employee benefit assets increased by about 3%, to $8 billion from just less than $7.9 billion.

The fund is almost completely managed in-house; it uses stock-index and fixed-income futures and bond options.

The Du Pont thrift plan was renamed the savings and investment plan with the addition of a 401(k) feature. As of Sept. 30, savings plan assets grew 17% to $1.4 billion from $1.2 billion the year before.

Outside managers for the savings plan are Bankers Trust for equities and Equitable Life for bonds.

As of Sept. 30, the asset mix for the pension fund was 68% stocks, 15% bonds, 10% cash equivalents, and 7% mortgage-backed securities.

Wilmingtion Trust Co. is the master trustee.

Overseeing investments are David F. Marvin, vice president, and A.H. Nehrling, director-employee benefits.

Eastern Air Lines

	($ millions)
Total assets	1,500
Pension	1,500
Profit-sharing	0
Thrift or savings	0
Employer contributions	80
Benefit payments	na

MIAMI — Eastern Air Lines proposed to contribute a debt security to its fixed benefit plan in 1984 that would replace the pilots' part of a $25 million cash contribution the company failed to meet in 1983.

The Department of Labor, however, sent Eastern back to the drawing board to redesign the seven-year note because the 9% interest rate it would carry was too low.

Eastern estimated its employee benefit assets rose by about 7%, to $1.5 billion on Sept. 30, 1984 from $1.4 billion on Sept. 30, 1983. About $900 million of that represents the fixed-benefit retirement plan. The remaining $600 million makes up the pilots' variable benefit fund and a variable benefit retirement plan for ground employees.

The variable-benefit fund took a "significant" amount of assets inhouse in 1984, officials said. About one-third of the plan is now run internally. Eastern officials did not provide a breakdown, however.

The fund also hired Trust Co. of the West to run an unspecified amount of money in real estate, oil and gas and equities.

Variable plan managers: Waite & Correnti; Amoskeag National Bank and Trust; Campbell Advisors; Capital Guardian; Crocker National Bank; National Investment Services; NCNB National Bank; Rollert & Sullivan; Southland Trust; Thorndike, Doran, Paine & Lewis; and Trust Co. of the West.

Fixed-benefit plan managers: (according to the 1985 Money Market Directory) Abel Noser; Delaware Trust; Equitable; INVESCO; Kent Associates; Norwest Capital; Prudential Asset Management; Rollert & Sullivan; TCW Asset Management; and Waite & Correnti.

The directory lists Prudential Asset Management as manager for the ground employees' variable-benefit plan.

At the outset of 1984, Eastern hired Northern Trust to replace Chase Manhattan Bank as master trustee of the fixed-benefit plan. State Street Bank & Trust is master trustee for the pilots' variable-benefit plan.

Robert Wallace, director-pension asset management, oversees investments.

Eastman Kodak

	($ millions)
Total assets	5,103*
Pension	4,256
Profit-sharing	847
Thrift or savings	0
Employer contributions	84
Benefit payments	196

* P&I Age estimate

ROCHESTER, N.Y. — Based on Eastman Kodak's reported total of $4.8 billion in employee benefit assets as of Dec. 31, 1983, *Pensions & Investment Age* estimates that the funds totaled $5.1 billion as of Sept. 30, 1984. That represents an increase of 9% over last year's estimate of about $4.7 billion. *P&I Age* also estimated the employer contribution at $84 million.

In early 1984, Eastman Kodak committed to a venture capital fund offered by John Hancock, which invests in small- to medium-sized growth-oriented companies.

Through the venture capitalist firm Horsley, Keough & Associates, which was hired in 1984, Kodak made a private placement in convertible preferred stock of Synapse Computer Corp.

The fund made a number of changes in its manager lineup. Equity managers added last year are Analytic Investment Management; McKenzie, Walker Investment Management; and Waddell & Reed. JMB Institutional Realty was hired to oversee real estate; John Hancock, GICs; and Horsley, Keough & Associates, venture capital. The fund no longer has GICs with Equitable.

Equity managers: American National Bank; Analytic; Batterymarch; Fidelity Management; Kemper; McKenzie, Walker; Morgan Guaranty; Neuberger & Berman; T. Rowe Price; Rogers, Casey & Barksdale; State Street Research; Value Line; and Waddell & Reed.

Real estate managers: Aetna; Equitable; JMB; Prudential; and RREEF.

GICs: John Hancock and Metropolitan.

The fund has an estimated $156 million in real estate equity. It reported using index funds, stock options, venture capital and oil and gas investments, but did not disclose any figures. Also, investments were placed in international equities.

The approximate asset mix as of Dec. 31, 1983, was 56% stocks; 1% bonds; 5% cash equivalents; 3% real estate equity; 10% GICs; and 25% annuities.

Boston Safe Deposit & Trust Co. is the master trustee.

Key personnel are Russell L. Olson, director-pension investments and A. Duff Lewis Jr., pension investment coordinator.

Eaton Corp.

	($ millions)
Total assets	813
Pension	683
Profit-sharing	0
Thrift or savings	130
Employer contributions	75
Benefit payments	45

CLEVELAND — Pension assets fell $17 million in the year ended Sept. 30, despite a $30 million net corporate pension contribution after the payment of benefits.

Pension assets totaled $683 million, down 2.5% from the $700 million at Sept. 30, 1983. The company attributed the loss to "a drop in the market in general. The fund hasn't performed as well as the market."

Its employee savings assets were $130 million, up 30% in the year ended Sept. 30.

In 1984, the pension fund began using futures and investing in international investments. Its in-house staff buys and sells Standard & Poor's 500 futures contracts. In 1985, the fund expects to expand their use through Bankers Trust's S&P 500 futures fund.

The fund began a conventional S&P 500 stock-index fund, invested in the actual stocks with Bankers Trust, allocating $56 million. Also, it added a $16 million dedicated bond portfolio, yielding 12%. Salomon Brothers set it up and Bankers Trust reoptimized it. Altogether the fund now has $37 million in dedicated bond portfolios, all managed in-house.

In international, it hired Morgan Grenfell Investment Services to run $15 million in equities.

The fund dropped three equity managers — Stein Roe Farnham, Putnam and Century Capital Associates. It split their money between the Bankers Trust index fund and Morgan Grenfell.

After a four-year hiatus, Bankers Trust once again became master trustee, taking over from Mellon National Bank, which previously had replaced Bankers Trust.

As of Sept. 30, its pension asset mix was 63% domestic equities, 2% international equities, 12% bonds and 23% cash equivalents. The bonds include Eurodollar bonds run by MacKay-Shields. Eaton has $8 million in venture capital; it runs $84 million in equities in-house.

Equity managers: Thorndike Doran; Wellington; McConnell & Miller; Frontier Capital; Bankers Trust; E.W. Axe; Target Investors; Fidelity; Weiss Peck & Greer; and Oppenheimer.

Bond managers: Thorndike Doran; Wellington; and MacKay-Shields.

International equity manager: Morgan Grenfell.

Venture capital managers: Oxford Partners; Euclid Partners; Vista Ventures; and Mayfield V.

The key personnel are: John M. Carmont, treasurer; Richard J. Gabel, manager-pension funds; and Patricia A. McCoy, administrator-pension funds.

Funds investing in GICs
($ millions)

Fund	Assets
Shell Oil Co.	$ 1,342
Trans World Airlines	580
Eastman Kodak	520
Detroit Retirement Systems	404
Ford Motor Co.	400
General Dynamics	400
Gulf Oil Corp.	386
Westinghouse Electric Corp.	350
Marathon Oil Co.	337
New York City Employees	308
Dresser Industries Inc.	300
Mobil Oil	300
Consolidated Edison	285
Xerox Corp.	251
United Methodist Pension Fund	240
General Foods Corp.	233
United Presbyterian Church Pension Board (USA)	218
Dart & Kraft Inc.	208
Allied Corp.	200
International Union of Operating Engineers	195
J.C. Penney Co.	190
General Electric Co.	188
Exxon Corp.	186
Phillips Petroleum Co.	160
Employees Retirement System of Hawaii	153
Hercules Inc.	152
Philip Morris Inc.	150
Travelers Corp.	150
Tennessee Valley Authority	147
McDermott International Inc.	146
Continental Group Inc.	140
Southern California Edison	130
Halliburton Co.	123
Boilermakers, Blacksmiths National Pension Trust	120
Ashland Oil Inc.	112
ITT	110
Sun Co.	104
Ameritech	100
Bakery and Confectionary Union & Industry	100
International Harvester Co.	100
K mart Corp.	100
Inland Steel Co.	94
Colorado Public Employees Retirement	90
Martin Marietta Corp.	78
National Rural Electric Co-op.	78
Pacific Gas and Electric Co.	73
Southern New England Telephone Co.	71
Getty Oil Co.	68
State of Connecticut Trust Funds	67
Conoco Inc.	60
Southern Co.	56
Chevron Corp.	53
Eli Lilly & Co.	52
Monsanto Co.	50
FMC Corp.	47
Dow Chemical Co.	45
Bechtel Power Corp.	40
Aluminum Co. of America	38
Marine Engineers Benefit Assoc.	38
Armco Inc.	29
Standard Oil Co. (Ohio)	28
United Technologies Corp.	25
Retirement Systems of Alabama	20
Raytheon Co.	20
Florida Power & Light Co.	18
Illinois State Universities Retirement System	16
Indiana State Teachers Retirement Fund	16
Honeywell Inc.	15
Motorola Inc.	15
Army and Air Force Exchange Service	14
PPG Industries	14
American Airlines	10
Greyhound Corp.	10
Los Angeles County Employees'	10
Massachusetts Employees and Teachers	7
Illinois State Board of Investment	6
Teamsters, Central States	6
National Intergroup Inc.	5
TOTAL	$11,700

Forthcoming issues will focus on: corporate finance, Feb. 4; treasury software, March 4; Taft-Hartley funds, April 1; and a separate investment adviser directory in April.

Episcopal Ministers' Church Pension Fund

	($ millions)
Total assets	820
Pension	820
Profit-sharing	0
Thrift or savings	0
Employer contributions	38
Benefit payments	24

NEW YORK — The Episcopal Church Pension Fund reported $820 million in employee benefit assets as of Sept. 30, all in pension assets. This is a 2.2% increase from the $802 million reported the previous year.

The fund will receive a $38 million contribution for 1984, down from $44 million in 1983, and pay out $24 million in benefits, up from $23 million.

Equity managers: J.P. Morgan and Alliance Capital.

Bond manager: J.P. Morgan.

The asset allocation of the fund was 56% stocks, 31% bonds, 12% cash and 1% mortgages; fixed-income futures are used.

Morgan Guaranty is custodian.

Key investment personnel are Robert A. Robinson, president; James B. Knowles, finance committee chairman; and David L. Brigham, finance committee member.

Exxon Corp.

	($ millions)
Total assets	7,388
Pension	4,484
Profit-sharing	0
Thrift or savings	2,904
Employer contributions	437
Benefit payments	280

NEW YORK — Exxon Corp.'s total employee benefits assets increased 12%, to $7.4 billion as of Sept. 30, from $6.6 billion the previous year.

During the year, Exxon allocated additional assets to existing real estate manager Corporate Property Investors.

Exxon runs $3.5 billion internally: about $1.77 billion in equities, $181 million in fixed income and $1.55 billion in short-term instruments.

In addition, $927 million in assets is indexed, while $186 million is invested in GICs.

Venture capital and oil and gas commitments total $56 million and $43 million respectively. About $150 million is invested internationally in equities. Another $607 million is directed toward equity real estate.

Exxon employs stock options and stock index futures in its investment program, as well.

The approximate asset mix of Exxon's pension assets as of Sept. 30 was: 55.1% equities, 8.7% bonds, 6.6% cash equivalents and 13.5% equity real estate. In addition, 16.1% of the plan represents insured assets, royalties and accrued income.

Equity managers: Citibank; RepublicBank Dallas; First City National Bank, Houston; Morgan Grenfell; State Street Bank; and Wells Fargo Investment Advisors.

Bond managers: Scudder, Stevens & Clark and State Street Research and Management.

Real estate managers: InterFirst Bank Dallas; Corporate Property Investors; Prudential; Equitable; and Aetna.

Royalties: First City National Bank of Houston and Louisiana National Bank.

Irving Trust is the company's master trustee.

Those overseeing investments for the fund are C.W. Williams, assistant treasurer; T.M. Castagna, manager; and M.F. Hoben, manager.

Funds investing in dedicated bond portfolios
($ millions)

Fund	Assets
Teamsters, Western Conference	$ 2,847
Ameritech	2,400
Bethlehem Steel Corp.	1,328
Chrysler Corp.	1,100
Teamsters, Central States	1,030
The Signal Companies	1,000
International Harvester Co.	913
The Firestone Tire & Rubber Co.	717
Mobil Oil	700
American Airlines	600
Gulf Oil Corp.	576
Armco Inc.	368
McDermott International Inc.	354
Honeywell Inc.	330
PPG Industries	330
Inland Steel Co.	299
R.J. Reynolds Industries	297
Ford Motor Co.	250
National Intergroup Inc.	228
Chicago Municipal Employees	222
Hercules Inc.	144
International Union of Operating Engineers	132
Pan American World Airways Inc.	130
Ohio Teachers Retirement System	115
Eli Lilly & Co.	110
Raytheon Co.	110
City of Milwaukee	91
Dow Chemical Co.	70
Dart & Kraft Inc.	63
Boilermakers, Blacksmiths	60
Indiana State Teachers Retirement Fund	60
United Technologies Corp.	59
Philip Morris Inc.	45
Eaton Corp.	37
Tennessee Valley Authority	33
United Methodist Pension Fund	28
Texas Instruments	10
Trans World Airlines	8
United Presbyterian Church Pension Board (USA)	8
TOTAL	$17,202

The Firestone Tire & Rubber Co.

	($ millions)
Total assets	964
Pension	964
Profit-sharing	0
Thrift or savings	0
Employer contributions	0
Benefit payments	104.3

AKRON, Ohio — The Firestone Tire & Rubber Co. is restructuring its pension plan into another defined benefit plan with identical benefits in order to recapture between $250 million and $300 million in excess assets. Since Sept. 30, it has purchased annuities with CIGNA as an early step in the procedure.

An Oppenheimer study released in spring 1984 on potential takeover targets and good stock buys puts the amount of Firestone's overfunding at $373 million.

In January, Firestone committed $6 million to Warburg, Pincus Capital Partners, a venture capital fund.

In all, Firestone had $8 million in venture capital.

The Firestone funds are all managed in-house. Total assets were reduced by 3.6%; no contributions were made this year, and benefit payments were down 13.1%.

As of Sept. 30, the approximate asset mix was 8% stocks (down from 40% a year earlier), 79% bonds (up from 60%), 12% cash equivalents and 1% real estate equity.

Dedicated and immunized bond funds held $717 million, up from $520 million last year.

Manufacturers Hanover Trust is the master trust.

James D. Oelschlager, assistant treasurer, and James D. Raith, portfolio manager, oversee the fund.

Florida Power & Light Co.

	($ millions)
Total assets	869
Pension	618
Profit-sharing	116
Thrift or savings	135
Employer contributions	na
Benefit payments	na

MIAMI — Florida Power & Light Co.'s employee benefit assets were $869 million in the year ended Sept. 30, up 14.3% from $760 million the previous year.

Its pension assets alone rose 9.8% to $618 million in the period, from $563 million.

The plan made no major changes in the last year.

Its asset mix was 60% stocks, 18% bonds, 19% cash equivalents and 3% real estate. The stocks include about $35 million in non-Canadian foreign equities. It also has $18 million in guaranteed investment contracts.

Equity managers: Rogers Casey Barksdale; Wells Fargo; Morgan Guaranty; Fayez Sarofim; Batterymarch; Lynch & Meyer; and Roanoke Asset Management.

Bond manager: Harris Trust & Savings Bank.

Real estate managers: John McMahan, JMB and RREEF.

GICs: Metropolitan Life.

Wachovia Bank is master trustee.

R.R. Sears is director of finance and assistant treasurer; Max Kuniansky is senior investment analyst.

Florida State Board of Administration

	($ millions)
Total assets	7,029
Pension	7,029
Profit-sharing	0
Thrift or savings	0
Employer contributions	780
Benefit payments	366

TALLAHASSEE, Fla. — During the year, the Florida State Board of Administration selected 30 managers, committing $2.665 billion and entering such new areas as international and real estate investments.

Among the new managers, it hired three to run options overwrite programs on 10% of its $3 billion in equities.

At the same time, it abruptly switched from primarily managing its assets to hiring outside managers. Before the changes, it had one outside manager, Bankers Trust, hired in mid-1983 to run a stock index fund.

Its pension assets grew 13% to $7.029 billion in the year ended last Sept. 30, from $6.205 billion a year earlier.

In 1985, it expects to broaden its investments further, adding more managers.

Its asset mix as of Sept. 30 was 42% stocks, 33% domestic bonds, 1% international bonds, 6% cash equivalents, 7% real estate equity and 11% mortgage-backed securities.

The fund's master custodian is Citibank.

Equity managers: Eagle; Stein Roe & Farnham; Fred Alger; Alliance; Bessemer Trust, Barrow Hanley; Batterymarch; Delaware Investment; Hutton Capital; Pioneering Management; Southeastern Asset Management; Bernstein Macaulay; INVESCO; Lazard Freres; Bankers Trust; and Westridge Capital.

Domestic bond managers: Alliance and Thorndike Doran.

International bond managers: BAIMCO and Morgan Grenfell.

Real estate managers: Goldman Sachs; LaSalle Partners; Equitable; Aetna; FNB Boston; Hancock; FNB Chicago; Prudential.

Options managers: Bear Stearns; Balch Hardy & Scheinman; and Travelers.

Key personnel overseeing the investment management of the fund are E.J. Yelton, executive director; Thomas Fox, deputy executive director-investments; Lan Janacek, equities portfolio manager; Steve Edelman, bond portfolio manager; Doug Bennett, real estate portfolio manager; and Carmen Hiers, short-term portfolio manager.

FMC Corp.

	($ millions)
Total assets	1,148
Pension	931
Profit-sharing	0
Thrift or savings	217
Employer contributions	12
Benefit payments	40

CHICAGO — FMC Corp. cut its annual pension contribution to "a very small amount" from $40 million in 1983. It declined to disclose the amount. It said most of the $12 million the company contributed in 1984 for employee benefits was for its 401(k) plan.

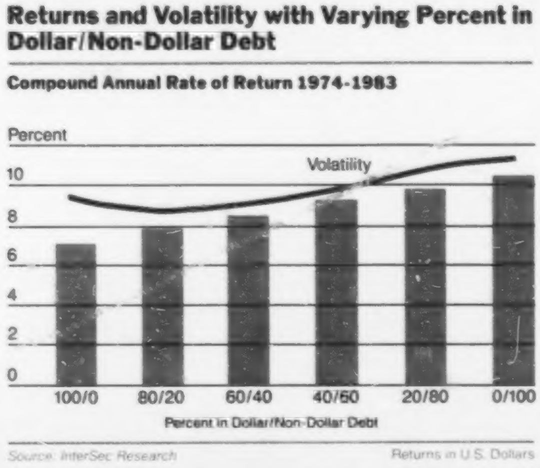
The company said the substantial cut occurred because the pension plan is approaching the full-funding limitation, no longer allowing deductions from corporate income tax for pension contributions.

In the year ended last Sept. 30, its pension assets grew almost 7% to $931 million. During the same time, its 401(k) assets grew 32% to $217 million. Total employee benefit assets increased by about 11%, to $1.148 billion from $1.035 billion.

The pension fund made no changes in managers during the year.

JB∞B

International fixed income programs offer a timely way to enhance your domestic bond portfolio



Returns and Volatility with Varying Percent in Dollar/Non-Dollar Debt

Compound Annual Rate of Return 1974-1983

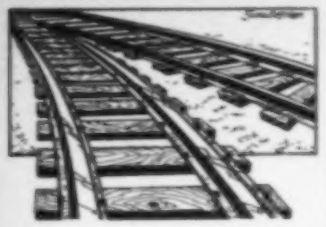
Source: InterSec Research

Returns in U.S. Dollars

Jay A. Dirnberger, Managing Director
JULIUS BAER INVESTMENT MANAGEMENT INC.

New York
330 MADISON AVENUE
NEW YORK, N.Y. 10017
(212) 949-9055

London (Branch)
3 LOMBARD STREET
LONDON EC3V 9ER
(01) 623-4211



It runs about $116 million in-house ($100 million in equities and $16 million in fixed income), the same amount as in 1983.

The asset mix was 69% domestic equities, 7% international equities, 15% bonds, 5% guaranteed investment contracts and 4% venture capital.

The master trustee is Bankers Trust.

Equity managers: Ruane Cunniff; Thorndike/Wellington; Beacon Financial; Templeton; Batterymarch; Tweedy Browne.

Bond manager: Equitable.

GICs: Metropolitan.

Key personnel include W.H. Schumann, director-investments, and B.R. van Eck, vice president, treasurer and secretary.

Ford Motor Co.

	($ millions)
Total assets	9,300
Pension	8,100
Profit-sharing	0
Thrift or savings	1,200
Employer contributions	na
Benefit payments	na

DEARBORN, Mich. — As of Sept. 30, the Ford Motor Co. had doubled its international holdings to $300 million from the $150 million it had held last year at that time. Of that, $250 million was in equity and the remainder in fixed income.

The fund continued its involvement in venture capital, becoming a limited partner in a fund set up by GeoCapital Ventures.

Employee benefit assets increased by about 4.5% during the year ended Sept. 30, to $9.3 billion from $8.9 billion a year earlier.

Of the fund's passive investments, $1.4 billion is indexed, $250 million is in dedicated or immunized bond funds and $400 million is in GICs.

The fund runs $500 million in fixed income in-house. Also, the fund has invested $150 million split evenly in real estate, mortgages and venture capital. Additionally, $30 million is in oil and gas.

The approximate asset mix of the pension assets as of Sept. 30 was stocks, 62%; bonds, 22%; cash equivalents, 9%; real estate equity, 1%; mortgages, 1%; and GICs, 5%.

Fixed-income futures are employed as a hedging device.

Manufacturers National Bank of Detroit is the master trustee.

Managers: Alliance Capital; Bank of Boston; Capital Guardian; Chase Investors; Citibank; Fidelity Management; GeoCapital; Harris Trust; Hathaway Associates; Manufacturers Bank—Detroit; Mitchell Hutchins; Morgan Guaranty; RepublicBank Dallas; Rollert & Sullivan; T. Rowe Price; Siebel Capital Management; Sarofim Trust Co.; Sit Investment Associates; State Street Research.

Key investment management personnel are R.C. White, assistant treasurer, and M.E. Maertens, manager-trust investment analysis.

Taft-Hartley fund issues will be examined April 1.

g

General Dynamics

	($ millions)
Total assets	2,700
Pension	1,700
Profit-sharing	0
Thrift or savings	1,000
Employer contributions	95
Benefit payments	45

CLAYTON, Mo. — General Dynamics hired Lehman Capital Management in 1984. It terminated several equity managers, including Lieber & Co.; Frontier; Gregg McKay Knight & McKay; Aetna; and Essex. It also no longer uses Mutual of New York for GICs.

The fund had a 7.2% increase in its assets to $2.7 billion on Sept. 30, from $2.517 billion a year earlier.

Asset mix for the fund as of Sept. 30 was 33% stocks, 42% bonds, 15% cash equivalents and 10% GICs.

Equity managers: Alliance; Anderson, Hoagland; Campbell Advisors; Citibank; Miller Anderson & Sherrerd; Neuberger & Berman; Provident Investment Counsel; Lindner Management; Lazard Freres; A.M. Kailing; Jundt/Capen; First Pacific Advisors; Equitable; Delaware Investment; Frank Russell Trust; Seibel Capital; Sit Investment; TCW Asset Management.

Bond managers: BA Investment Management; Centerre Trust; Chase Investors; Discount Corp. of New York; Bankers Trust Co.

GICs: Aetna; Equitable; Hancock; Metropolitan; Mutual Benefit; Travelers.

The company manages $100 million internally, all in fixed income; it has $400 million invested in GICs.

Master trustee for the pension fund is Chase Manhattan.

Key personnel are John P. Maguire, vice president and secretary, and Charles D. Walbrandt, staff vice president-employee benefit trust investments.

General Electric Co.

	($ millions)
Total assets	13,338
Pension	10,701
Profit-sharing	0
Thrift or savings	2,637
Employer contributions	679
Benefit payments	422

STAMFORD, Conn. — Edward H. Malone, who headed the General Electric Co. pension fund, retired at the end of 1984. He was succeeded by Dale F. Frey, former treasurer.

GE's total assets of $13.338 billion were up 11.6% for the year ended Sept. 30, from $11.993 billion a year earlier.

The pension plan had $10.701 billion; a thrift or savings plan, $2.445 billion; and an employee stock ownership plan, $192 million.

Essentially, all of the pension assets are managed in-house — about $5.305 billion in equities, $4.499 billion in fixed income, $567 million in short-term investments and $130 million in other types of investments.

GE invests $243 million internationally through one in-house manager and eight external international managers; ABD International was added during the year. About $200 million is in international equities and $43 million in international fixed income.

Another $188 million is in GICs.

The fund uses stock options and stock index futures. It has $250 million in venture capital and about $10 million in oil and gas.

General Electric has $283 million in real estate equities and $1.746 billion in mortgages.

The asset mix as of Sept. 30 was stocks, 45%; bonds, 21%; cash equivalents, 5%; real estate equity, 3%; mortgages, 14%; mortgage-backed securities, 2%; GICs, 2%; convertible and equity private placements, 3%; international equities, 2%; venture capital, 2%; and 1% miscellaneous.

Chase Manhattan is custodian for the plans.

Key investment personnel are Mr. Frey, vice president of investments; Arthur S. Bahr, manager-equity investments; and Frank X. Tansey, manager-fixed income investments.

General Foods Corp.

	($ millions)
Total assets	1,555*
Pension	1,382
Profit-sharing	0
Thrift or savings	173
Employer contributions	9
Benefit payments	35

* as of Sept. 1, 1984

WHITE PLAINS, N.Y. — General Foods added Trust Company of the West and DLJ Capital Corp. for real estate and venture capital, respectively, during the

Funds investing in equity real estate
($ millions)

Fund	Assets	Fund	Assets
Ohio Teachers Retirement System	$ 1,276	Sandia National Laboratories	$ 68
California Public Employees	841	Standard Oil Co. (Ohio)	67
General Motors Corp.	669	Marine Engineers Benefit Association	66
Teamsters, Western Conference	631	J.C. Penney Co.	66
Exxon Corp.	605	Conoco Inc.	63
Prudential Insurance Co.	529	K mart Corp.	60
Florida State Board of Administration	492	Grumman Corp	60
Oregon Public Employees	420	Travelers Corp.	59
U.N. Joint Staff Pension Fund	379	General Foods Corp.	56
Westinghouse Electric Corp.	372	National Intergroup Inc.	55
Bell Atlantic Corp.	360	Raytheon Co.	55
Ameritech	320	Illinois State Universities	54
Boeing Co.	315	Army and Air Force Exchange	53
General Electric Co.	283	Dow Chemical Co.	52
Pennsylvania State Employees	276	Union Carbide Corp.	50
Shell Oil Co.	264	GTE Service Corp.	49
Pacific Telesis Group	240	R.J. Reynolds Industries	48
State of Connecticut Trust Funds	236	Aetna Life & Casualty	44
Virginia Supplemental	223	World Bank	43
Allied Corp.	200	Maryland State Retirement	41
Chevron Corp.	189	Unocal	41
Armco Inc.	187	I.A.M. National Pension Fund	40
United Technologies Corp.	179	United Methodist Pension Fund	38
United Air Lines	175	Merck & Co.	38
Caterpillar Tractor Co.	172	Sears, Roebuck & Co.	36
Metropolitan Life Insurance Co.	167	Dresser Industries Inc.	35
Sun Co.	157	Illinois Teachers' Retirement System	34
Ohio Public Employees	148	CIGNA Corp.	31
Goodyear Tire & Rubber	146	Eli Lilly & Co.	30
Monsanto Co.	144	New York Life Insurance Co.	29
Hughes Aircraft Co.	142	Texas Instruments	28
United Mine Workers of America	139	Chicago Municipal Employees	27
Pennsylvania Public School Employees	139	Michigan State Employees Retirement System	27
Alaska State Retirement Systems	135	Southern New England Telephone Co.	25
Ohio School Employees	134	California State Teachers' Retirement System	25
New York State Teachers	128	Trans World Airlines	23
Eastman Kodak	128	New York State Common Retirement Fund	23
Utah State Retirement Fund	126	Ashland Oil Inc.	22
Consolidated Edison	122	Hawaii Employees Retirement	22
Honeywell Inc.	114	Motorola Inc.	22
Continental Group Inc.	110	Philip Morris Inc.	19
Hospital & Health Care Employees	106	Xerox Corp.	19
Teamsters, Central States	103	Florida Power & Light Co.	19
The LTV Corp.	102	United Presbyterian Church Pension Board (USA)	19
Owens-Illinois Inc.	101	Tennessee Valley Authority	18
Aluminum Co. of America	96	Deere & Co.	16
ITT	94	Ohio Police and Firemen's	16
Hercules Inc.	92	Kentucky Teachers' Retirement System	15
Phillips Petroleum Co.	89	PPG Industries	14
Illinois State Board of Investment	86	Kentucky Retirement Systems	14
Colorado Public Employees	86	Nevada Public Employees' Retirement System	12
San Francisco City & County	85	Detroit Retirement Systems	10
Chrysler Corp.	85	Greyhound Corp.	10
Standard Oil Co. (Ind.)	81	Firestone Tire & Rubber Co.	10
Ford Motor Co.	81	Kansas Public Employees Retirement System	9
North Carolina Retirement System	80	Los Angeles County Employees'	9
Pacific Gas and Electric Co.	75	Wisconsin State Board of Investment	8
John Hancock Mutual Life Insurance Co.	75	Textron Inc.	8
Minnesota Mining and Manufacturing Co.	73	Southern California Edison	7
Inland Steel Co.	72	Southern Co.	7
Washington State Investment Board	70	Retirement Systems of Alabama	4
		TOTAL	$15,703

year ended Sept. 30, 1984. It also dropped Rothschild Asset Management.

The company, however, continues to hold two alternative investment accounts, including one for real estate, with Rothschild Inc.

Employee benefit assets remained relatively flat at General Foods in the plan year ended Sept. 1. Total assets grew only $55 million during that period, while pension plan assets declined by $18 million.

The company has $7 million invested internationally, $16.6 million in venture capital, $58 million in equity real estate and $233 million in GICs.

The asset mix for pension assets was 38% stocks, 17% bonds, 23% cash equivalents, 4% real estate equity, 1% venture capital and 17% GICs.

Managers: Aetna; Alliance; Bankers Trust; Batterymarch; BEA Associates; Chase Investors; Citibank; First Wisconsin National Bank; Jennison Associates; Hancock; John Hancock Venture Capital; JMB Realty; Metropolitan; Morgan Guaranty; NM Rothschild International; Northern Trust; Prudential; Thorndike Doran; and Trinity Investment.

Key investment personnel are R.D. Nargi, assistant treasurer; R.A. Weimert, manager; and S.C. Philbrick, assistant manager.

General Motors Corp.

	($ millions)
Total assets	22,799*
Pension	20,275
Profit-sharing	0
Thrift or savings	2,524
Employer contributions	na
Benefit payments	na

*P&I Age estimate

NEW YORK — General Motors' total employee benefit assets grew 15.8% to $22,799 million, *Pensions & Investment Age* estimates. As of Dec. 31, 1983, the assets totaled $19,687 million. Pension assets were estimated at $20,275 million, up from $17,508 million as of Dec. 31, 1983.

As of the same date, the asset mix was 49.9% stocks, 19% bonds, 6.1% cash, 3.3% real estate, 0.7% mortgages, 3.1% GICs and 17.9% annuities.

General Motors manages "a small percentage" of its assets internally, although this is expected to rise to at least $1 billion in the future.

It also has assets invested in international markets, managed by nine outside investment firms, and in real estate.

Domestic managers: Aetna; Aldrich, Eastman & Waltch; American National Bank; AmeriTrust; Bank of America; Bankers Trust; Boston Co.; Capital Guardian Trust; Chase Manhattan; Citibank; FNB Boston; FNB Chicago; Harris Trust; InterFirst Bank, Dallas; INVESCO; Landauer Advisors; Lincoln Capital; Manufacturers Hanover; Mellon Bank; Metropolitan Life; Morgan Guaranty Trust, National Bank of Detroit; Prudential Insurance; Schroder Capital; TCW Asset Management; United Capital; Wells Fargo Bank.

International managers: ABD; Baring; Daiwa; Fidelity International; G.T. Capital; Kleinwort Benson; Morgan Grenfell; Nomura; Rowe Price-Fleming.

GM has three master trustees: Bankers Trust; Mellon; Chase Manhattan.

W. Gordon Binns Jr., is chief investment funds officer; R. Charles Tschampion is director-investment management relations.

Funds investing in mortgages
($ millions)

Fund	Assets
New York State Common	$ 2,554
New York State Teachers	1,539
General Electric Co.	1,498
Michigan State Employees	1,244
Pennsylvania Public School Employees	884
Ohio Teachers Retirement System	851
California State Teachers	836
Colorado Public Employees	559
Hawaii Employees Retirement System	462
Los Angeles County Employees	457
Maryland State Retirement	452
Teamsters, Central States	414
Alaska State Retirement Systems	406
Texas Teachers Retirement System	293
Pennsylvania State Employees	267
Oregon Public Employees	252
Retirement Systems of Alabama	242
Arizona State Retirement System	214
New York City Employees	212
San Francisco City & County	202
Detroit Retirement Systems	200
Wisconsin State Board of Investment	174
Nevada Public Employees' Retirement System	173
General Motors Corp.	142
Textron Inc.	138
Goodyear Tire & Rubber	128
West Virginia Board of Investments	114
Kentucky Teachers' Retirement System	89
Ford Motor Co.	81
Chicago Municipal Employees	72
CIGNA Corp.	70
Southern Baptist Convention	65
Texas County & District Retirement Systems	64
Westinghouse Electric Corp.	62
Ohio School Employees	59
University of California Retirement System	55
Georgia State Retirement Systems	47
Owens-Illinois Inc.	47
Boeing Co.	39
Arkansas Teacher Retirement System	38
Illinois State Board of Investment	37
Bakery and Confectionary Union & Industry	30
Phillips Petroleum Co.	28
Travelers Corp.	25
Louisiana State Employees	25
International Union of Operating Engineers	24
Missouri Public School	21
Monsanto Co.	18
Utah State Retirement Fund	18
Ashland Oil Inc.	17
Aluminum Co. of America	16
Marine Engineers Benefit Association	15
Army and Air Force Exchange Service	15
United Technologies Corp.	15
Aetna Life & Casualty	11
Shell Oil Co.	10
Episcopal Ministers' Church Pension Fund	8
Houston Retirement	8
Minnesota Mining and Manufacturing Co.	7
U S WEST	2
United Methodist Pension Fund	2
TOTAL	**$16,047**

Georgia State Retirement Systems

	($ millions)
Total assets	4,723
Pension	4,723
Profit-sharing	0
Thrift or savings	0
Employer contributions	368
Benefit payments	269

ATLANTA — The Georgia State Retirement Systems hired Thorndike, Doran, Paine & Lewis as equity adviser for its $1.3 billion Employee Retirement System Dec. 1. The firm already advises the $3.4 billion Teachers' Retirement System.

The combined funds are managed completely in-house with outside equity advisers.

Equity advisers: Citizens & Southern (teachers fund only); FNB Atlanta (employees' fund only); INVESCO and Thorndike, Doran (both funds).

As of Sept. 30, the combined systems had $4.72 billion in assets, up 12% from the previous year.

The asset mix was 40% stocks, 52% bonds, 3% cash equivalents, 1% mortgages and 4% mortgage-backed securities.

Citizens & Southern is custodian for the teachers' fund, FNB Atlanta for the employees' fund.

Graham R. Lynch is director-division of investment services; C.W. Cary, assistant director; and Nancy Boedy, bond portfolio manager.

Getty Oil Co.

	($ millions)
Total assets	1,128
Pension	710
Profit-sharing	0
Thrift or savings	418
Employer contributions	40
Benefit payments	30

LOS ANGELES — In 1984, Getty Oil Co. was acquired by Texaco Inc. No changes are expected soon in the management of Getty's employee benefit assets as a result of the acquisition.

Getty made no changes during the year in investment strategy or managers.

The pension assets fell slightly in the year ended Sept. 30, a 2% decrease it attributed to slipping markets. At Sept. 30, the pension assets totaled $710 million, down from $721 million the previous year. The company made a $10 million net pension contribution.

Employee benefit assets — the pension fund, employee savings and ESOP — rose 16.4% to $1.128 billion from $969 million a year earlier.

Getty's pension asset mix was 54% equities, 11% bonds, 25% cash equivalents, 10% GICs.

The company has $1 million in real estate equity.

Of the pension assets, Getty runs $146 million in-house: $58 million in fixed income and $88 million in short term.

Equity managers: Fred Alger; Frontier; Avatar; Jennison Associates; McKenzie Walker; Rollert & Sullivan; Security Pacific Investment.

Bond managers: CMB Investment Counselors; Robert C. Brown; STW.

Real estate manager: Citibank.

GICs: Aetna, NWNL, Prudential.

Chase Manhattan is master trustee.

Bruce C. Anderson is assistant treasurer.

Funds investing in mortgage-backed securities
($ millions)

Fund	Assets
Texas Teachers Retirement System	$ 2,146
New York State Common Retirement Fund	1,596
Ohio Public Employees Retirement System	1,322
New Jersey Division of Investment	1,100
Retirement Systems of Alabama	942
Florida State Board of Administration	773
Massachusetts State Employees & State Teachers	720
North Carolina Retirement System	717
New York City Employees	635
South Carolina Retirement System	577
Minnesota State Board of Investment	561
New York State Teachers Retirement System	513
E.I. du Pont de Nemours & Co. Inc.	467
Wisconsin State Board of Investment	435
Chrysler Corp.	424
Connecticut Trust Funds	357
Missouri Public School	336
Nevada Public Employees' Retirement System	297
Ohio School Employees Retirement System	297
Illinois Municipal Retirement Fund	270
Illinois Teachers' Retirement System	261
Teamsters, Central States	258
Ohio Police & Firemen	249
Iowa Public Employees	239
Virginia Supplemental Retirement System	216
General Electric Co.	214
Pennsylvania State Employees	205
Employees Retirement System of Texas	197
Kentucky Retirement Systems	190
Georgia State Retirement Systems	189
Kansas Public Employees Retirement System	165
Mobil Oil	*150*
New Mexico Educational Retirement Board	130
Teamsters, Western Conference	123
International Union of Operating Engineers	120
Indiana State Teachers Retirement Fund	100
Shell Oil Co.	89
West Virginia Board of Investments	89
Employees Retirement System of Hawaii	88
City of Milwaukee	88
United Mine Workers of America	84
Detroit Retirement Systems	83
Los Angeles Water and Power Employees	80
Pennsylvania Public School Employees	79
Kentucky Teachers' Retirement System	74
Inland Steel Co.	72
Utah State Retirement Fund	72
Philadelphia Municipal Pension Fund	69
Louisiana State Employees	62
Oklahoma Teachers' Retirement	52
Illinois State Board of Investment	49
Alaska State Retirement Systems	37
Arkansas Teacher Retirement System	33
Aluminum Co. of America	32
National Rural Electric Co-op	27
Tennessee Valley Authority	19
Sandia National Laboratories	15
Army and Air Force Exchange Service	15
Indiana Public Employees	13
Unocal	8
Conoco Inc.	7
Ashland Oil Inc.	6
Dart & Kraft Inc.	3
Continental Group Inc.	2
TOTAL	**$18,838**

Goodyear Tire & Rubber

	($ millions)
Total assets	1,854
Pension	1,822
Profit-sharing	0
Thrift or savings	32
Employer contributions	72
Benefit payments	121

AKRON, Ohio — Goodyear's employee benefit plans hired one new equity manager in 1984 — Bankers Trust.

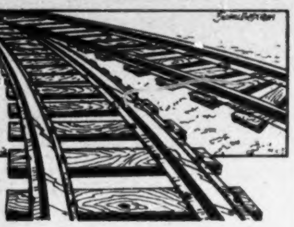
Total employee benefit assets for the year ended Sept. 30 were about $1.86 billion, a 3.6% increase from the $1.78 billion reported a year earlier.

The asset mix for the fund as of Sept. 30 was 51% stocks, 27% bonds, 8% real estate equity, 7% mortgages and 7% other.

The fund has $26.2 million in an indexed portfolio, $182.2 million in real estate equity, $91.1 million in venture capital and $36.8 million in foreign equities.

Equity managers: National City Bank of Cleveland; Bankers Trust; Travelers Investment Management.

Balanced managers: Prudential; Morgan Guaranty; Equitable;



Chemical; Citibank; National Bank of Detroit.

Real estate managers: Prudential; Morgan Guaranty; Equitable.

Key investment personnel include Richard Galloway, assistant treasurer; James Glass, executive vice president; and Donald Kronenburger, vice president.

Greyhound Corp.

	($ millions)
Total assets	900
Pension	900
Profit-sharing	0
Thrift or savings	0
Employer contributions	na
Benefit payments	na

PHOENIX — Employee benefit assets at Greyhound increased $74 million, or 8.96%, between June 30, 1983 and Sept. 30, 1984. All of the assets are pension assets.

Asset mix for the fund is 45% stocks, 52.8% bonds, 1.1% real estate equity and 1.1% GICs.

Master trustee for the fund is Wells Fargo Bank and Bank of America.

Equity managers: Wells Fargo; Aetna; Wright.

Balanced managers: West Bank; Security Pacific; Loomis Sayles; National Bank of Detroit.

Bond managers: Brown; CIGNA; Aetna; MH/Edie.

Real estate managers: FNB Chicago; Citibank.

The fund has $250 million in indexed assets and $10 million invested in GICs.

It has less than $10 million in equity real estate.

Key personnel for the fund include Richard B. Zoller, vice president- investments, and Pat Freeman, investments administrator.

Grumman Corp

	($ millions)
Total assets	1,726*
Pension	1,197
Profit-sharing	0
Thrift or savings	529
Employer contributions	70
Benefit payments	40

**P&I Age estimate*

BETHPAGE, N.Y. — Grumman Corp.'s employee benefit assets are estimated to have grown 9.2% to $1,726 million in the year ended Sept. 30.

The most recent figure available from Grumman was $1,545 million as of Dec. 31, 1983. Pension assets at that time totaled $1,091 million and thrift assets were $454 million.

All Grumman's pension assets except real estate are managed internally, with more than $400 million in stocks, a like amount in fixed income and almost $200 million in short-term assets.

Balanced managers: Fiduciary Trust (employee savings plan) and Connecticut General (a subsidiary retirement plan).

Real estate managers: Prudential and Equitable.

The approximate asset mix was 39% stocks, 38% bonds, 17% cash, 5% real estate and 1% venture capital.

W.R. Parmentier, assistant treasurer/investment manager, oversees the fund.

GTE Service Corp.

	($ millions)
Total assets	4,900
Pension	4,900
Profit-sharing	0
Thrift or savings	0
Employer contributions	300
Benefit payments	160

STAMFORD, Conn. — Several key executives of GTE Service Corp. left during the year, including James Dunn Jr., vice president and treasurer of GTE Corp. and president of GTE Investment Management; William P. Marshall, vice president for research and strategies at GTE Investment Management; and Andrew L. Heiskell, vice president-fixed income.

John B. Carroll, previously with Evaluation Associates, a leading consulting firm, was named president of GTE Investment Management; Richard H. Klemm was named vice president-pension management. Peter Gable was promoted to vice president-fixed income, to replace Mr. Heiskell.

GTE's pension assets grew by only $100 million — 2% — in the year ended Sept. 30, to $4,900 million from $4,800 million. The company contributed approximately $300 million to the fund in 1984 and paid out an estimated $160 million in benefits.

During the year, at least 13 managers were added, including Dean Witter Reynolds; Eagle Management & Trust; First Manhattan; Grantham, Mayo, Van Otterloo; and Hutton Capital Management. At least nine were dropped, including First & Merchants National Bank; Ivory & Sime International; Kingsley, Jennison, McNulty & Morse; and McKay-Shields Financial Corp.

Managers: Bankers Trust; Baring International; Bartow McLeod International; BMI Capital; Boston Co.; Cashman, Farrell; Century Capital; Citibank; Dean Witter Reynolds Intercapital; Eagle Management; Endowment Management & Research; Fidelity International; First Manhattan Co.; First Pacific Advisors; Franklin Portfolio Associates; Frontier; General American Advisors; GeoCapital Corp.; Grantham Mayo, Van Otterloo; G.T. Capital; Hambrecht & Quist; Hathaway Associates; Hellman, Jordan; Hoisington; Hotchkis & Wiley; Hutton Capital; Johnson, Valiant & Broadfoot; Manufacturers Hanover Investment; Marine Trust; Morgan Grenfell; Morgan Guaranty; Morgan Stanley Asset Management; Neville, Rodie & Shaw; Pacific Financial Research; PIMCO; Pioneering Management; T. Rowe Price; PRIMECAP; Provident Investment; Putnam Advisory; Roley, Nichols; Rothschild, Unterberg, Towbin International; Rowe-Price Fleming International; Fayez Sarofim; Shafer Capital; Solomon Asset; Sovran Bank; State Street Bank; Treynor-Arbit; Trust Co. of the West; Trustee & Investors; Warburg Pincus; Wentworth, Hauser; Wertheim-Philippe.

The asset mix as of Sept. 30 was 69% stocks, 22% bonds, 8% cash equivalents and 1% real estate equity.

Although GTE did not report how much it has invested internationally, it uses at least nine international managers and has almost 10% of its assets with them. It also invests in real estate, venture capital and oil and gas. It has $200 million in indexed funds.

Mr. Carroll and Mr. Klemm are among the key investment personnel.

Gulf Oil Corp.

	($ millions)
Total assets	2,238
Pension	1,960
Profit-sharing	0
Thrift or savings	278
Employer contributions	na
Benefit payments	137

PITTSBURGH — Gulf Oil Corp. increased the amount of assets in its dedicated bond portfolio during 1984 by $30.5 million to $576 million.

Employee benefit assets increased about 9.1% for the year ended Sept. 30, to $2.238 billion from $2.05 billion a year earlier.

The asset mix at Gulf on Sept. 30 was stocks, 38%; bonds, 39%; GICs, 21%; cash, 1%; and other, 1%.

Equity managers: Jennison; Rosenberg Capital; Putnam Advisory; MacKay-Shields; Avatar; Cambiar; Estabrook; Lynch & Mayer; Rollert & Sullivan; Winchester Capital.

Bonds: Mellon Bank and State Street Research & Management.

Real estate: Mellon Capital.

Mellon Bank is master trustee.

C.M. Short, chief financial officer; W.D. McGuinness, assistant treasurer; J.E. Saxer Jr., manager-pension fund investment; and F.L. Daniels, senior associate-pension fund investment, oversee the fund.

h

Halliburton Co.

	($ millions)
Total assets	881
Pension	0
Profit-sharing	842
Thrift or savings	39
Employer contributions	46
Benefit payments	39

DUNCAN, Okla. — Employee benefit assets of the Halliburton Company increased by 12% during the year ended Sept. 30, to $881 million from $785 million.

About $842 million is in the company's profit-sharing plan with $39 million in thrift and savings plans, including $17 million in the company's 401(k) plan.

About $141 million is managed internally.

During 1984 Halliburton dropped Vaughan, Nelson & Hargrove as a balanced manager and Forstmann Leff for equities.

Wentworth, Hauser & Violich and INVESCO Capital Management were hired as balanced managers.

Balanced managers: Lehman; InterFirst Investment Management; Wentworth, Hauser; INVESCO.

Bond managers: PIMCO.

The asset mix for the combined profit-sharing and thrift plans was 39% stocks, 30% bonds, 15% cash, 2% mortgages and 14% GICs.

William T. Sheets is plan administrator; Nathaniel H. Duffield is chairman of the profit sharing committee.

John Hancock Mutual Life Insurance Co.

	($ millions)
Total assets	873
Pension	737
Profit-sharing	117
Thrift or savings	19
Employer contributions	12
Benefit payments	33

BOSTON — John Hancock's employee benefit assets totaled $873 million as of Sept. 30, an increase of 3% from the $847 million reported the previous year.

Of the total, $737 million were pension assets, $117 million were profit-sharing assets and $19 million were in thrift or savings plan assets.

All of the assets are managed in-house, except for $33 million in profit-sharing assets.

Managers: T. Rowe Price and IDS Advisory (profit sharing).

The insurer has $10 million in venture capital; during 1984, the pension fund was one of 14 funds committing to the insurer's Capital Growth Fund One.

Hancock has $92.6 million in GICs, all invested from profit-sharing and savings assets. It has $75.2 million in real estate investments, but no breakdown between equities and mortgages was available.

Robert Thurrell, general director-corporate benefits, retired during 1984.

Key personnel overseeing investments are Philip Saunders Jr., senior vice president and treasurer, and Page Palmer, director of corporate benefits.

Funds investing overseas
($ millions)

Fund	Assets
United Nations Joint Staff Pension Fund	$1,298
E.I. du Pont de Nemours & Co. Inc.	884
Ford Motor Co.	300
United Air Lines	300
Prudential Insurance Co. of America	269
World Bank	265
AT&T	254
General Electric Co.	243
United Technologies Corp.	221
U.S. Steel and Carnegie Pension Fund	200
Allied Corp.	170
Exxon Corp.	149
Sun Co.	137
Consolidated Edison	122
Monsanto Co.	120
Owens-Illinois Inc.	116
Caterpillar Tractor Co.	112
Florida State Board of Administration	110
Sears, Roebuck & Co.	108
Xerox Corp.	108
American Airlines	103
Bechtel Power Corp.	100
Employees Retirement System of Hawaii	100
Trans World Airlines	100
TRW Inc.	93
Standard Oil Co. (Ind.)	92
Minnesota Mining and Manufacturing Co.	84
Oregon Public Employees Retirement System	78
Aluminum Co. of America	74
Continental Group Inc.	73
FMC Corp.	65
The National Rural Electric Co-op.	60
Motorola Inc.	55
Mobil Oil	50
Travelers Corp.	50
Delta Air Lines Inc.	47
Commonwealth Edison Co.	43
Aetna Life & Casualty	41
Dow Chemical Co.	40
Marine Engineers Benefit Association	40
Martin Marietta Corp.	40
Hercules Inc.	39
Inland Steel Co.	38
Goodyear Tire & Rubber	37
ITT	37
Boeing Co.	36
Florida Power & Light Co.	35
Tennessee Consolidated Retirement System	35
Unocal	35
Teachers' Retirement System of Illinois	33
United Presbyterian Church Pension Board (USA)	32
Merck & Co.	31
Honeywell Inc.	30
Phillips Petroleum Co.	30
Alaska State Retirement Systems	28
J.C. Penney Co.	27
Philip Morris Inc.	25
Conoco Inc.	22
Hughes Aircraft Co.	20
Eli Lilly & Co.	18
Ashland Oil Inc.	16
Army and Air Force Exchange Service	15
Dart & Kraft Inc.	15
Eaton Corp.	15
Episcopal Ministers' Church Pension Fund	15
Southern California Edison	15
PPG Industries	14
Southern Co.	12
CIGNA Corp.	10
Chicago Teachers' Retirement Fund	9
General Foods Corp.	7
Pan American World Airways Inc.	7
Municipal Employees Annuity & Benefit Fund of Chicago	6
Raytheon Co.	6
Sperry Corp.	5
Houston Retirement	4
Marathon Oil Co.	3
TOTAL	$7,676

Employees' Retirement System of Hawaii

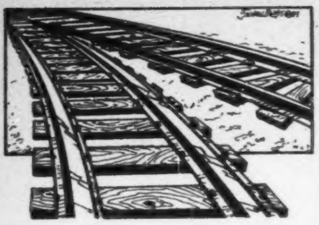
	($ millions)
Total assets	2,200*
Pension	2,200
Profit-sharing	0
Thrift or savings	0
Employer contributions	169
Benefit payments	89

*as of June 30, 1984

HONOLULU — The Hawaii Employees' Retirement System shifted $100 million in assets to two closed-end real estate funds and one separate account in the summer of 1984, bringing the fund up to its 5% real estate target allocation.

Metropolitan Life Insurance Co. and Aetna Life & Casualty were picked to run the new closed-end funds, and CIGNA Capital Advisors the direct account.

Total assets of the fund as of June 30 were $2.2 billion, up about 5.3% from the $2.013 billion reported as of Sept. 30, 1983.



The Hawaii retirement system has a diversified asset mix. As of June 30, the mix was 20% stocks, 31% bonds, 11% cash, 1% real estate, 21% mortgages, 4% mortgage-backed securities, 7% GICs and 5% in other investment vehicles.

The system manages $214.8 million internally.

Irving Trust Co. is master custodian.

Equity managers: Bernstein-Macaulay; Delaware; Eagle Management; Loomis, Sayles; Scudder Stevens.

Bond managers: Bernstein-Macaulay; Lehman Management; PIMCO; Security Pacific Investment; Scudder Stevens; Wentworth, Hauser; Fayez Sarofim.

Real estate: Aetna; Equitable; Prudential.

International managers: Daiwa International and Nomura.

Stanley Siu, secretary; David Y. Shimabukuro, assistant secretary; and Howard Loo, chief accountant, are the key personnel overseeing the investment management.

Hercules Inc.

	($ millions)
Total assets	965
Pension	840
Profit-sharing	0
Thrift or savings	125
Employer contributions	0
Benefit payments	32

WILMINGTON, Del. — Hercules Inc. made no contributions to its pension plan in 1984 because it was fully funded. Total employee benefit assets decreased slightly during the year ended Sept. 30, to $965 million from $976 million.

Equity managers: Batterymarch; Beutel Goodman; Capital Guardian; Citibank; Cooke & Bieler; General American.

Bond manager: Robert C. Brown.

Real estate managers: Aetna; Equitable; Prudential.

International managers: Fidelity; Morgan Guaranty; Warburg Investment.

GICs: Aetna; Equitable; New York Life; Prudential; Travelers; Union Mutual; New England Life.

Money market fund manager: (for 401(k) plan) Wells Fargo.

Wells Fargo runs a stock-index fund for the company's savings and 401(k) plan.

Hercules has $144 million of pension fund assets in a dedicated bond program.

The approximate asset mix of the company's pension assets as of Sept. 30 was 42% stocks, 19% bonds, 11% real estate, 20% GICs, 7% cash and 1% accruals.

Bankers Trust is master trustee.

John Long, manager-pension trust, and Alexander Searl, assistant treasurer, oversee investment management.

Honeywell Inc.

	($ millions)
Total assets	1,285
Pension	1,135
Profit-sharing	0
Thrift or savings	150
Employer contributions	92
Benefit payments	45

MINNEAPOLIS — During 1984, Honeywell Inc. hired its first international managers, beginning with a total commitment of $30 million.

Also, it added another venture capital manager, its 14th, when the corporation contributed its $8 million interest in the New Court Partners pool as part of its $92 million annual contribution to the pension fund. The contribution of the New Court Partners interest received Department of Labor approval, the company said. The other $84 million was in cash.

The pension fund added three domestic fixed-income managers, Bridge Capital, Forstmann Little and a John Hancock Mutual debt pool specializing in small and medium-sized growth companies.

The fund dropped one real estate manager, Equitable Life Assurance.

Also, it is winding down a fixed-income account with Bankers Trust, now at $500,000.

It also dropped an options overwrite program Analytic Investment Management ran for about three years.

The fund, however, continues to use stock-index futures through Leland O'Brien Rubenstein Associates.

Also, a bond manager, Fischer Francis Trees & Watts, has used fixed-income futures for the fund.

In 1984, the fund added a $65 million dedicated bond portfolio, yielding 13.5%. Altogether, it now has $330 million in dedicated bond portfolios, all set up and managed by Fischer Francis Trees & Watts.

The fund's asset mix was 47% domestic equities, 3% international equities, 35% bonds, 10% real estate equity, 2.5% venture capital and 2.5% oil and gas.

The master trustee is Chase Manhattan Bank.

Equity managers: Abel Noser; Alliance Capital; Batterymarch; Dawson-Henry; Forstmann-Leff; GAMCO; Herbert R. Smith; Jundt/Capen Associates; RCB Special Group Trust, Siebel Capital; TCW Asset Management.

Bond managers: Fischer Francis; Bridge Capital; Forstmann Little; John Hancock; Bankers Trust.

GICs: Metropolitan Life.

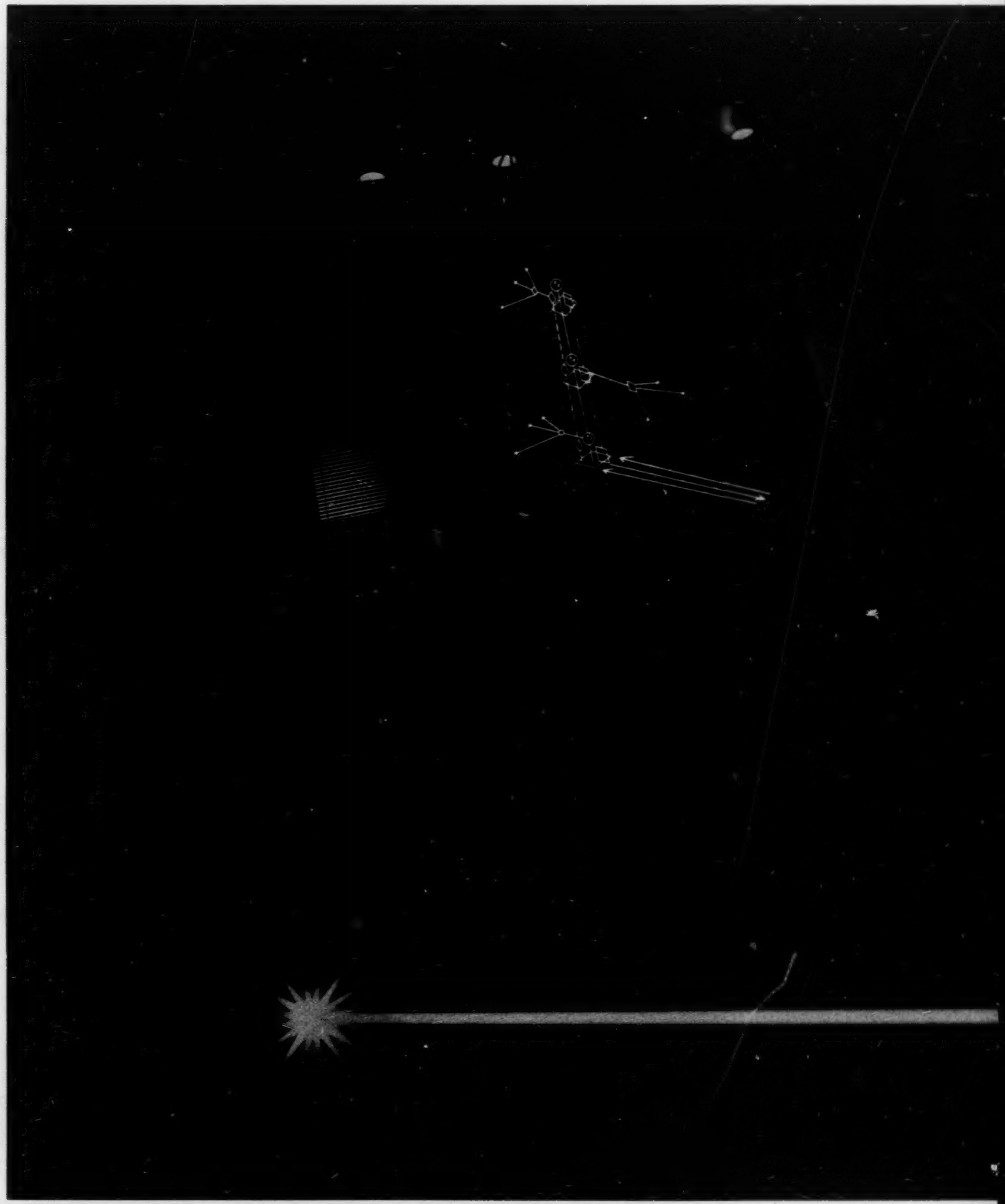
International equity managers: Mellon Pictet; Baring International; IDS Gartmore.

Real estate managers: Coldwell Banker; John Hancock; Landauer Associates; John McMahan; State Street Bank; Trust Company of the West.

Venture capital managers: Ventech Partners; New Court Partners; T.A. Associates Advent V; Arscott Norton & Associates II; Associated Venture Investors; Centennial Fund; Concord Partners; Dougery Jones & Wilder; Forstmann-Little; Investech; Morgan Holland; Narragansett First Fund; Robertson Coleman Stephens & Woodman RCWS II; Welsh Carson Anderson & Stowe WCAS III.

Oil and gas managers: First Reserve; TCW.

Robert T. Mall is vice president, pension investments, and Deborah W. Veverka is manager, financial planning and control.



Houston Retirement

	($ millions)
Total assets	774
Pension	774
Profit-sharing	0
Thrift or savings	0
Employer contributions	58
Benefit payments	33

HOUSTON — The Houston Retirement System had employee benefit assets of $774 million as of Sept. 30, an increase of 9.8% from the $705 million reported a year ago.

Asset mix was 45% stocks, 34% bonds, 20% cash and 1% mortgages.

Houston expanded its stable of managers in 1984 by hiring Lexington Management; Gulf Investment Management; American Capital Advisors; Batterymarch; and Barrow, Hanley, Mewhinney & Strauss for equities and Wentworth Hauser; Loomis, Sayles and MacKay-Shields for bonds.

Balanced managers: Texas Commerce Bank; First City Bank; Eagle Management; Vaughan Nelson.

Equity managers: Lexington Management; Gulf Investment; American Capital; Barrow, Hanley.

Bond managers: Wentworth, Hauser; Loomis, Sayles; MacKay-Shields.

Real estate: Eagle Realty and JMB Institutional.

William Brown Jr. is city treasurer. Jean Umberson is pension plans administrator.

Hughes Aircraft Co.

	($ millions)
Total assets	2,722*
Pension	2,024
Profit-sharing	0
Thrift or savings	698
Employer contributions	na
Benefit payments	na

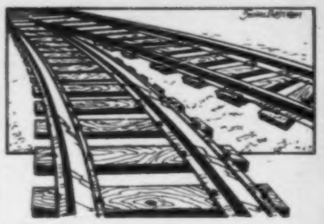
*as of June 30, 1984

CULVER CITY, Calif. — W. Allen Reed has been named vice president-investment management for Hughes Aircraft, succeeding Gary Helms, who left in May to reenter the field of money management.

Mr. Reed had been a portfolio manager with Allen & Associates Investment Management Inc. in Atlanta.

Hughes had $2.277 billion in employee benefit assets at the end of June 1984, according to the 1985 Money Market Directory.

Managers: Pension plan — Alliance Capital; Capital Guardian; Coldwell Banker; Dillon, Read; Eberstadt; Forstmann-Leff; Frontier Capital Management; G.T. Capital; Hagler, Mastrovita; Jennison Associates; MacKay-Shields; McKenzie, Walker Investment; Neuberger & Berman; T. Rowe Price; Putnam Advisory; Putnam Fixed Income; Reich & Tang; Rollert & Sullivan; Rosenberg Capital Management; and RREEF. Savings plan — Alliance; Jennison; McKenzie, Walker; Rosenberg Capital; Scudder, Stevens & Clark; and TCW Asset Management. All of these were identified through the Money Market Directory.

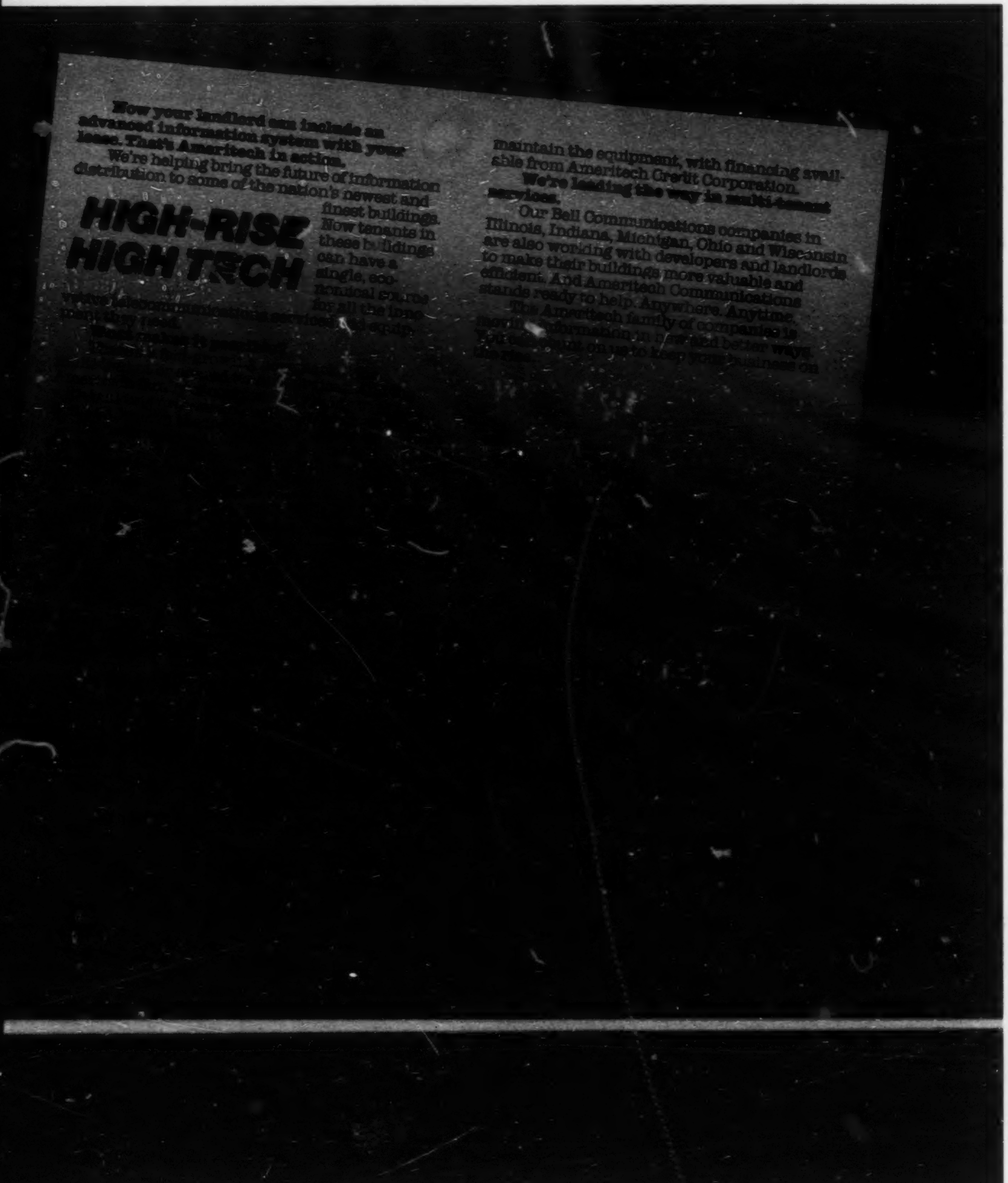


Hughes also manages some benefit assets in-house, but did not disclose the amounts.

According to the Money Market Directory, the asset mix for the pension assets as of June 30 was 59% stocks, 4% bonds, 18% cash equivalents, 7% real estate equity, 1% oil and gas, 4% venture capital, 1% international and 6% general insurance investments.

Master trustee for the plan is Bankers Trust.

Overseeing fund investment along with Mr. Reed is Thomas V. Keene, senior vice president-finance.



Now your landlord can include an advanced information system with your lease. That's Ameritech in action.

We're helping bring the future of information distribution to some of the nation's newest and finest buildings. Now tenants in these buildings can have a single, economical source for all the innovative telecommunications services and equipment they need.

[illegible]

maintain the equipment, with financing available from Ameritech Credit Corporation.

We're leading the way in multi-tenant services.

Our Bell Communications companies in Illinois, Indiana, Michigan, Ohio and Wisconsin are also working with developers and landlords to make their buildings more valuable and efficient. And Ameritech Communications stands ready to help. Anywhere. Anytime.

The Ameritech family of companies is moving information in new and better ways. You can count on us to keep your business on the rise.

I.A.M. National Pension Fund

	($ millions)
Total assets	800
Pension	800
Profit-sharing	0
Thrift or savings	0
Employer contributions	73
Benefit payments	61

WASHINGTON — In 1984, the Department of Labor filed suit against the president of I.A.M. and investment counselor Sidney A. King for violation of the Employee Retirement Income Security Act.

Assets in the fund increased 3.9% to $800 million as of Sept. 30, from $770 million a year earlier.

Asset mix of the fund is 40% stocks, 37% bonds, 18% cash equivalents, and 5% real estate equity.

Equity managers: PIMCO; Dodge and Cox; L.F. Rothschild, Unterberg, Towbin; Lazard Freres.

Bond managers: PIMCO; Dodge and Cox; L.F. Rothschild, Unterberg, Towbin.

Master trustee for the fund is State Street Bank and Trust Co.

Alan W. Skolnick is fund director.

Illinois Municipal Retirement Fund

	($ millions)
Total assets	1,932
Pension	1,932
Profit-sharing	0
Thrift or savings	0
Employer contributions	105
Benefit payments	96

CHICAGO — The Illinois Municipal Retirement Fund hired four new equity managers in 1984 including American National Bank; Batterymarch; Dimensional Fund Advisors and Fidelity Management Trust.

Assets for the year ended Sept. 30, increased 8.8% to $1,932 million from $1,775 million. The asset mix of the fund as of Sept. 30 was 35% stocks, 37% bonds, 13% cash equivalents, 14% mortgage backed securities and 1% convertible debentures.

Equity managers: American National Bank; Batterymarch; Dillon Read; Dimensional Fund Advisors; Fidelity Management; MacKay-Shields.

Bond managers: Criterion; Manufacturers Hanover Invest-

Discount Corporation of New York Advisers

Institutional Fixed Income
Asset Management

A Wholly Owned
Subsidiary of
Discount Corporation
of New York

58 Pine Street
New York, N.Y. 10005
212-248-8989
WU 125675

ment Corp.

Master trustee for the fund is Continental Illinois Bank.

Key personnel for the fund include Marvin Lapicola, president; Robert L. Cusma, executive director; and Hiro Mori, investment manager.

Illinois State Board of Investment

	($ millions)
Total assets	1,630
Pension	1,630
Profit-sharing	0
Thrift or savings	0
Employer contributions	20
Benefit payments	na

CHICAGO — In 1984, the Illinois State Board of Investment placed $11 million with three new venture capital funds. Menlo Ventures III was given $3 million to manage; Frontenac Venture Fund IV, $3 million; and Thoma Cressey Fund II, $5 million.

Pension assets increased 4.8% during the year ended Sept. 30, to $1.63 billion from $1.55 billion.

Asset mix for the fund is 45.6% stocks, 36.3% bonds, 5.3% cash equivalents, 5.3% real estate equity, 2.3% mortgages, 3% mortgage backed securities, 0.5% GICs and 1.7% other. The fund manages $1.5 billion internally.

Master trustee is Northern Trust.

Real estate managers: Aetna; FNB Chicago; HAC Group Trust; and JMB.

Venture capital managers: Golder Thoma; Frontenac; and Menlo Ventures.

Key personnel include Robert J. Harmon, director; Larry G. Darlington, portfolio manager for fixed income; and Nancy L. Folstad, portfolio manager for equities.

Illinois Teachers' Retirement System

	($ millions)
Total assets	3,788
Pension	3,788
Profit-sharing	0
Thrift or savings	0
Employer contributions	214
Benefit payments	315

SPRINGFIELD, Ill. — The Teachers' Retirement System of the State of Illinois hired additional equity and real estate managers and ventured into venture capital in 1984.

The system hired Alliance Capital Management as one of its core equity managers, to manage more than $100 million. TCW Realty Advisers was hired to manage somewhat less than $25 million in real estate. No managers were dropped.

The system also entered into a limited partnership with Frontenac Co. for a $10 million venture capital investment.

The system's pension assets stood at $3.78 billion Sept. 30, up 5% from the $3.6 billion it had a year earlier.

Employer contribution to the system increased 48%, to $214 million Sept. 30 from $144 million Sept. 30, 1983, as the state's financial condition improved, said Samuel W. Anderson, executive director.

The system has $33 million in international investments and $33 million in real estate. It has no investments in mortgages or oil and gas. It uses fixed income futures as a hedging device.

Equity managers: Alliance; Batterymarch; CMB Investment Counselors; Criterion; Kemper.

Bond managers: Dreyfus; MacKay-Shields; PIMCO; T. Rowe Price; Marine Bank of Springfield.

Real estate managers: TCW and First Chicago.

Venture capital manager: Frontenac.

The asset mix is 34.4% equities, 31.3% bonds, 26.5% cash equivalents, 0.9% real estate equity and 6.9% mortgages.

Harris Trust and Savings Bank is master trustee.

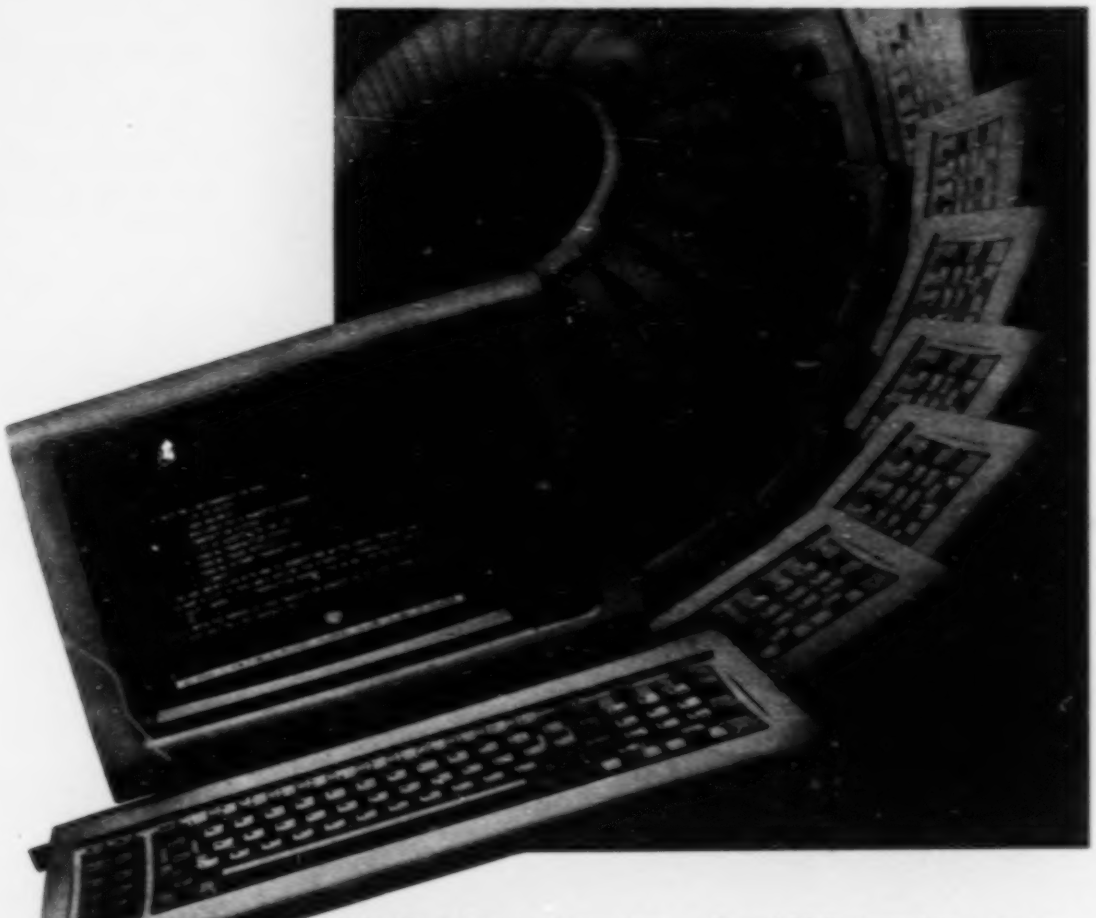
Key personnel overseeing the system's investment management are Mr. Anderson and Charles F. Hofer, investment officer.

Illinois State Universities' Retirement System

	($ millions)
Total assets	1,581
Pension	1,581
Profit-sharing	0
Thrift or savings	0
Employer contributions	75
Benefit payments	110

CHAMPAIGN, Ill.— The Illinois State Universities' Retirement System moved $110 million to American National Bank, Chicago, tripling its commitment to stock index funds. The money was allocated from an account run by Alliance Capital Management, leaving it with $100 million. In addition, the fund had $36 million invested

Mellon moves Master Trust systems into the future.



Mellon Bank's newest electronic reporting system gives you the future, now. You can call up your Master Trust investment reports and cash position on your own terminal (of your own choice), in your own format, ready for immediate printing and distribution from your office.

Because the system also has *interactive* capabilities, it allows you to modify or expand the format of the reports as you wish. The whole reporting process is at your fingertips. But that's only the latest of many advantages you get from Mellon's leadership in electronic systems.

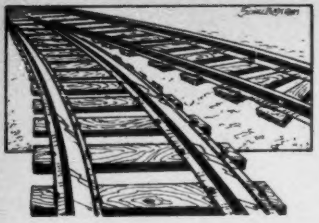
Global integration. Mellon's software is designed to integrate your international management reports on demand.

Speed. Mellon's own laser printers can turn out reports at 20,000 lines per minute. That's why we can send out your cash statements in just three business days.

Simplicity. Mellon's Analytical Services can convert the usual numerical Master Trust reports into simple color graphics that give you the picture instantly.

These are just a few of the features that have helped Mellon's Master Trust administrators build an enviable reputation for accurate, timely reporting. To find out how Mellon's systems can work for you, phone Mary Anne Dugan, at (412) 234-6349. Or write to her at Mellon Bank, One Mellon Bank Center, Pittsburgh, PA 15258.

Mellon Bank



Funds using futures

Stock index

Aluminum Co. of America
Ameritech
Atlantic Richfield Co.
Bechtel Power Corp.
Chevron Corp.
Commonwealth Edison Co.
Dow Chemical Co.
E.I. du Pont de Nemours & Co. Inc.
Eaton Corp.

Fixed income

Alaska State Retirement Systems
Aluminum Co. of America
Ameritech
Ashland Oil Inc.
Atlantic Richfield Co.
Bechtel Power Corp.
Chevron Corp.
Conoco Inc.
Dow Chemical Co.
E.I. du Pont de Nemours & Co. Inc.
Episcopal Ministers' Pension Fund
Ford Motor Co.
Gulf Oil Corp.
Honeywell Inc.
Illinois Teachers'
Illinois State Universities
IBM Corp.
Kansas Public Employees
3M
Monsanto Co.
Ohio Teachers Retirement System
Owens-Illinois Inc.
RCA Corp.
R.J. Reynolds Industries
Southern California Edison
Standard Oil Co. (Ind.)
Sun Co.
Union Carbide Corp.
United Mine Workers of America
Westinghouse Electric Corp.
West Virginia Board

with Dimensional Fund Advisors, in an index equity fund of small-capitalization stocks.

Also in 1984, the state universities' system hired Northern Trust as master custodian. The fund also finalized plans to commit $180 million from cash flow during the next three years with the RREEF funds.

As of Sept. 30, 1984, employee benefit assets — all pension assets — increased 5% to more than $1.58 billion from $1.5 billion in 1983.

Equity managers: American National Bank; Alliance; Fayez Sarofim; Dimensional Fund Advisors; Batterymarch.

Bond managers: PIMCO and Lehman Management.

Balanced managers: Criterion.

Real estate managers: RREEF.

The asset mix was 45.8% stocks, 32.5% bonds, 17.9% cash equivalents, 3.4% real estate equity and 0.4% convertible securities.

Illinois Universities has about $138 million indexed, $16 million invested in GICs and $20 million invested in real estate equity.

The Northern Trust, Chicago, is master custodian.

Charles M. Hundley, associate director, oversees investment management of the fund.

Indiana Public Employees' Retirement Fund

	($ millions)
Total assets	1,338
Pension	1,338
Profit-sharing	0
Thrift or savings	0
Employer contributions	85
Benefit payments	70

INDIANAPOLIS — Assets of the Indiana Public Employees' Retirement Fund increased 15% during the year ended Sept. 30, to $1.33 billion from $1.16 billion.

As of Sept. 30, its asset mix was 82% bonds, 17% cash equivalents, and 1% mortgage backed securities.

Bond managers: American Fletcher National Bank; Indiana National Bank; Lehman Management; T. Rowe Price.

Philip Barnes, manager investment department, oversees the investment of the fund.

Indiana State Teachers' Retirement Fund

	($ millions)
Total assets	773*
Pension	773
Profit-sharing	0
Thrift or savings	0
Employer contributions	134
Benefit payments	134

*as of June 30, 1984.

INDIANAPOLIS — Assets of the Indiana State Teachers' Retirement Fund increased 6.3% during the year ended June 30, to $773 million from $727 million.

Asset mix was 84% bonds, 1% cash equivalents, 13% mortgage-backed securities and 2% guaranteed investment contracts. State statute probibits equity investments.

Indiana National Bank is custodian.

Bond managers: Alliance; Bank of New York, American Fletcher National Bank; Indiana National Bank; Baxter & Hoops.

Edmond G. Niehoff is assistant executive secretary.

Inland Steel Co.

	($ millions)
Total assets	1,217
Pension	1,028
Profit-sharing	0
Thrift or savings	189
Employer contributions	70
Benefit payments	77

CHICAGO — Total employee benefit assets at Inland Steel Co. increased 4.3% during the year ended Sept. 30, to $1.217 billion from $1.167 billion.

Contributions to the fund of $70 million were $8 million lower than last year, while benefits of $77 million were just $1 million more than in 1983.

The fund dropped equity manager Endowment Management & Research.

Equity managers: American National Bank of Chicago; Sanford C. Bernstein; Dimensional Fund Advisors; Equitable; FNB Chicago; INVESCO; Oppenheimer Capital; Putnam; State Street Research; Waddell & Reed.

Bond manager: Lincoln Income group.

Real estate managers: Equitable; First Chicago; JMB; Prudential.

International manager: Baring Brothers.

Venture capital manager: FNB Chicago.

The approximate asset mix was 47% equities, 14% bonds, 16% cash equivalents, 7% real estate equity, 7% mortgage-backed securities and 9% GICs.

FNB Chicago is master trustee.

Key personnel are J.E. Dittus, treasurer, and R.J. Schutter, manager of pension investment.

International Business Machines Corp.

	($ millions)
Total assets	10,918
Pension	10,918
Profit-sharing	0
Thrift or savings	0
Employer contributions	na
Benefit payments	na

STAMFORD, Conn. — The pension assets of IBM Corp. grew 7.9% in the year ended Sept. 30, to $10.918 billion from $10.118 billion.

Besides stocks and bonds, the fund uses almost the full range of investment vehicles — real estate, international, venture capital, stock and bond options and stock index and fixed-income futures.

During the year, at least five new equity managers were added: Franklin Portfolio Associates; John Hancock Venture Capital Management; Lombard-Odier International; Solomon Asset Management; and TCW Asset Management.

Other equity managers: Bankers Trust; Capital Guardian; Citibank; Cole, Yeager & Wood; Delaware Investment Advisers; Dimensional Fund Advisers; G.T. Capital Management; Fidelity International; Hathaway Associates; Lord, Abbett; Morgan Guaranty; PM Portfolio Management; Rowe Price-Fleming International; State Street Research; State Street Bank; T. Rowe Price; Treynor-Arbit; Wellington Management.

Bond managers: Jennison Associaties; Fisher, Francis, Trees & Watts.

Real estate managers: Prudential; RREEF; Equitable.

IBM manages $4 billion internally divided between equities and fixed income. Its master trustee is Chase Manhattan Bank.

B.E. Langton, assistant treasurer; W.V. Hoyt, director, investment strategy; and R.E. Shultz, director of U.S. retirement funds oversee the investment of the assets.

International Harvester Co.

	($ millions)
Total assets	1,227
Pension	1,200
Profit-sharing	0
Thrift or savings	27
Employer contributions	117
Benefit payments	200

CHICAGO — For International Harvester Co.'s pension fund, 1984 marked the first major changes — and to some degree, a new dynamism — since the dedication of nearly all of its pension assets three years ago.

IH resumed its annual corporate contributions, contributing $117 million, after having deferred most of its contributions in 1982 and 1983.

In addition, IH said its dedicated portfolio, set up in 1982 with around $1 billion, throws off more cash than the $200 million a year the company needs to pay benefits.

During the year, the fund hired its first equity manager — Michael B. O'Higgins & Co. — since firing its 11 managers and selling off the stocks to buy bonds for the dedication. It started O'Higgins with $5 million, then made another allocation later.

Also, IH sold its farm equipment unit to a unit of Tenneco Inc., making a small dent in its $827 million in unfunded pension liabilities by transferring about $75 million in unfunded pension liabilities.

IH reported pension assets of $1.2 billion as of Sept. 30, about the same as the 1.16 billion as of Jan. 1, 1983.

In addition, it has $27 million in an employee savings plan that it is winding down. The company no longer contributes to the savings plan, and officials said most of those assets are being distributed to beneficiaries. Ultimately, the company said the savings plan might retain about $5 million.

Its pension asset mix was about $913 million in the dedicated portfolio consisting mostly of bonds and about $100 million in a Prudential Insurance Co. real estate pool and $100 million in guaranteed investment contracts.

Outside the dedication, it has the equities run by O'Higgins and the remaining equities, now run in-house, not sold off for the dedication.

In addition, it has some direct real estate investments managed in-house.

Its master trustee is Bankers Trust.

Bond manager: Jennison.

Real estate manager: Prudential.

GIC managers: Aetna; Association Life; Connecticut General; Equitable; John Hancock.

The key personnel are James C. Cotting, vice chairman and chief financial officer; Robert C. Lannert, treasurer; and Ashok S. Shende, manager, pension planning.

Funds using options

Bond options

Ameritech
Conoco Inc.
E.I. du Pont de Nemours & Co. Inc.
IBM Corp.
Los Angeles City Employees
3M
Monsanto Co.
Southern California Edison
Sun Co.
Tennessee Consolidated
Texas Instruments
Union Carbide Corp.
Westinghouse Electric Corp.

Stock options

Retirement Systems of Alabama
Allied Corp.
Aluminum Co. of America
American Airlines
Ameritech
Army and Air Force Exchange
Ashland Oil inc.
Atlantic Richfield Co.
Caterpillar Tractor Co.
Municipal Employees of Chicago
Dart & Kraft Inc.
Dow Chemical Co.
Eastman Kodak
Exxon Corp.
Florida State Board
General Electric Co.
Grumman Corp.
Illinois State Board of Investment
Inland Steel Co.
IBM Corp.
Kansas Public Employees
Los Angeles City Employees
Marine Engineers
3M
Minnesota State Board
Monsanto Co.
New Jersey Division of Investment
New York State Teachers
North Carolina Retirement System
Ohio School Employees
Ohio Teachers Retirement System
Oregon Public Employees
Pennsylvania Public School
Pennsylvania State Employees
Sears, Roebuck & Co.
Shell Oil Co.
Southern California Edison
Southern New England Telephone
Sperry Corp
Sun Co.
Tennessee Consolidated
Texas Instruments
Union Carbide Corp.
Utah State Retirement Fund
Westinghouse Electric Corp.
World Bank

International Paper Co.

	($ millions)
Total assets	1,014*
Pension	975
Profit-sharing	25
Thrift or savings	14
Employer contributions	20
Benefit payments	na

*as of June 30, 1984

NEW YORK — International Paper Co.'s employee benefit assets totaled $1.014 billion as of June 30, according to the 1985 Money Market Directory. The consolidated employee retirement plan totaled $975 million, an employee stock ownership plan held roughly $25 million and a foundation fund held $14 million.

The company also had a 401(k) plan, which totaled $156 million.

Employer contribution as of Dec. 31, 1983, was $20 million, according to the company annual report. The benefits payment for the year is not known, but a change in the actuarial method of valuing plan assets resulted in a decrease of $8 million in 1983 pension expense.

Equity managers: Bankers Trust; Capital Guardian; Endowment Management & Research; Investors Research; Fayez Sarofim; State Street Bank.

INVESTMENT
DECISION-
MAKING
SUPPORT.

Quality, professional independent research, custom-selected for your specific needs.

CIS ... Quietly Bolstering Your Investment Decision Making.

CIS
CAPITAL INSTITUTIONAL SERVICES INC.

Trading Facilities
Equities Dallas 800-527-5756, in Texas 214/742-5065
Fixed Income New York 800-247-8888 in New York State 212/321-2111
Financial Futures Chicago 800-862-9393, in Illinois 312/559-9784

Regional Sales Offices
Dallas 214/742-5457
New York 212/321-2202
Chicago 312/559-9780

Corporate Headquarters
Dallas, Texas

MEMBER NASD
MEMBER SIPC

Bond managers: Bankers Trust; J.P. Morgan; State Street Research.

Real estate managers: Aldrich, Eastman & Waltch; Citicorp; Equitable; LaSalle Street Fund; Prudential Asset Management; and RREEF.

A portion of assets is invested internationally.

Rowe Price-Fleming manages a separate account for the fund and J.P. Morgan manages international pooled funds for the fund. Amounts are not known.

Custodian for the stock ownership plan and the 401(k) is Chemical Bank. State Street is custodian for the foundation fund, and State Street Bank is master trustee for the pension plan.

Charles T. Henry is manager of trust investments.

Iowa Public Employees Retirement System

	($ millions)
Total assets	2,173
Pension	2,173
Profit-sharing	0
Thrift or savings	0
Employer contributions	110
Benefit payments	100

DES MOINES, Iowa — The Iowa Public Employees Retirement System is undergoing a restructuring, evaluating its asset mix with the idea of hiring additional money managers.

Wilshire Associates is consultant for the restructuring.

The fund's assets grew 9.8% during the year ended Sept. 30, to $2.173 billion from $1.979 billion in 1983.

The asset mix was 61% bonds, 17% stocks, 11% in cash equivalents and 11% in mortgage backed-securities.

Equity managers: Alliance and Capital Guardian.

Bond manager: The Boston Co.

Morgan Guaranty is correspondent bank.

Larry Thompson, investment officer, and Maurice Baringer, administrator, oversee investments.

International Telephone & Telegraph Corp.

	($ millions)
Total assets	1,683*
Pension	1,179
Profit-sharing	25
Thrift or savings	479
Employer contributions	70
Benefit payments	na

*as of June 30, 1983

NEW YORK — Total employee benefit assets at ITT Corp. dropped slightly — by $9 million — during the year ended June 30, to $1.683 billion from $1.692 billion a year ago.

Pension fund assets rose by $5 million to $1.174 billion.

ITT hired Lazard Freres for international during 1984, bringing its total international exposure to about $37 million.

ITT runs about $265 million of its employee benefit assets in-house.

Equity managers: Barrow, Hanley, Mewhinney & Strauss; Glickenhaus; Jennison; Manufacturers Hanover Trust; Verus Capital.

Balanced managers: Alliance; Crocker Investment, J.P. Morgan; T. Rowe Price.

Real estate managers: Coldwell Banker; Equitable; Metropolitan; RREEF; Corporate Property Investors.

GICs: Aetna; Massachusetts Mutual; Metropolitan.

International managers: Alliance; Capital Guardian; G.T. Capital; Lazard Freres; Morgan Grenfell.

The approximate asset mix was 52% in stocks, 28% in bonds, 12% in cash equivalents and 8% in real estate.

Northern Trust is the master trustee.

Key personnel are Edwin J. Ehrlich, director-pension fund trust, and Pamela Messmore, manager-pension fund trust.

k

K mart Corp.

	($ millions)
Total assets	780
Pension	600
Profit-sharing	0
Thrift or savings	180
Employer contributions	43
Benefit payments	15

TROY, Mich. — K mart Corp. made three moves in 1984 in an attempt to lock in gains in the equity market.

The fund placed $60 million in three commingled real estate funds for its first allotment to real estate equity. The three funds, each receiving $20 million, were Smith,

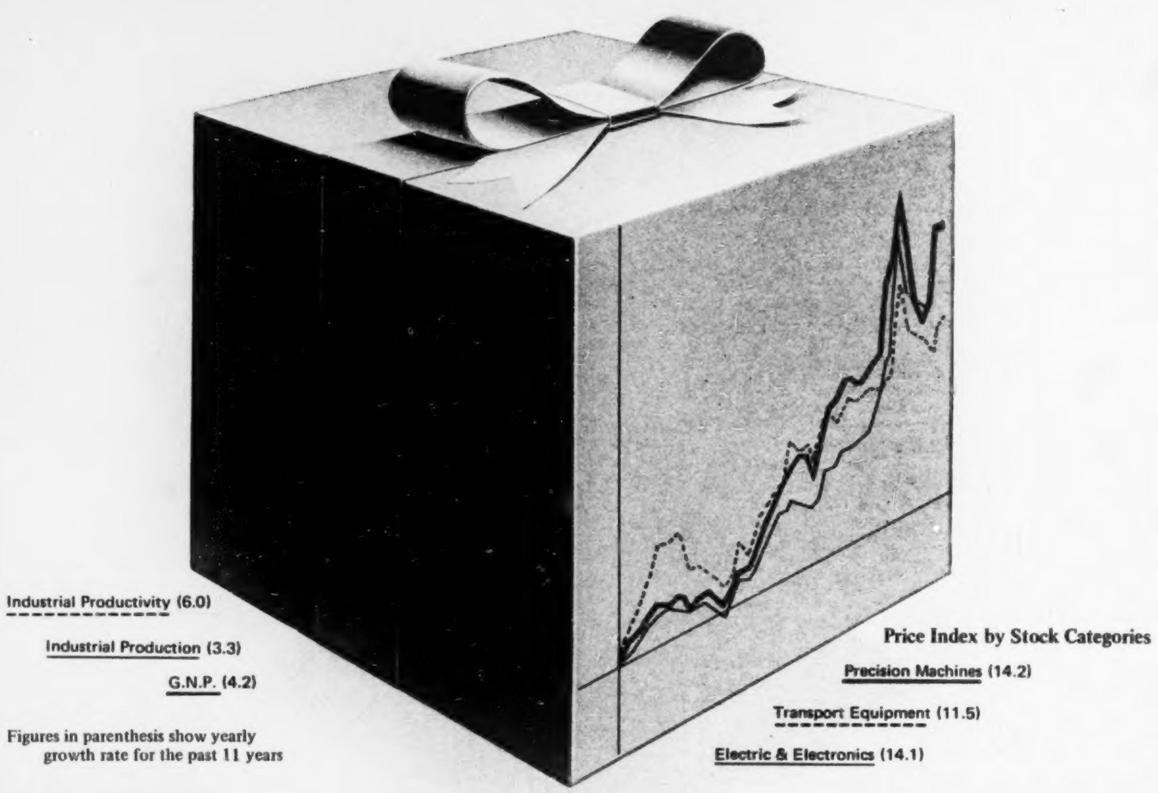
Denver Investment Advisors, Inc.

633 Seventeenth Street; Suite 1800
Post Office Box 17487
Denver, Colorado 80217

Dennis E. Larkin
Vice President
(303) 293-5588

Equity ■ Balanced ■ Fixed Portfolios

THE JAPAN PACKAGE


Industrial Productivity (6.0)
Industrial Production (3.3)
G.N.P. (4.2)
Price Index by Stock Categories
Precision Machines (14.2)
Transport Equipment (11.5)
Electric & Electronics (14.1)

Figures in parenthesis show yearly growth rate for the past 11 years

We Help You Take The Wraps Off This High Growth Market

Considering moving into the yen market? You ought to know about New Japan Capital Management. Right in the heart of New York City the U.S. subsidiary of New Japan Capital Management Co., Ltd. has been established as your portal to the dynamic Japanese economy.

Our investment know-how will assist you in preparing a portfolio in Japan — custom built to your investment objectives — the way only a well established Japanese firm can. Our resources include *New Japan Securities Group* that has gained an international reputation for the value of its investment services and advice.

To open the Japan package [illegible] arn more about our performance record and investment procedures; call or write: New Japan Capital Management, One World Trade Center, Suite 4959, New York, New York 10048 Phone (212) 938-5602

"The member of New Japan Securities Group"

NEW JAPAN CAPITAL MANAGEMENT CO., LTD.
7-9, 1-chome, Nihonbashi, Chuo-ku, Tokyo 103, Japan
Tel.: (03)-278-1661

NEW JAPAN CAPITAL MANAGEMENT (U.S.A.), INC.
One World Trade Center, Suite 4959 New York, New York 10048
Tel.: (212) 938-5602

Barney; JMB Institutional; and Equitec Institutional.

The fund also purchased $60 million in GICs with New York Life.

K mart hired Midwest Investment Advisory Services and Avatar Associates, both market timers, to run $15 million each.

The fund increased its assets 39% during the year ended Sept. 30, to $780 million from $560 million a year earlier.

Equity managers: Midwest Investment Advisory; Alliance; State Street Research; T. Rowe Price; Dimensional Fund Advisors; Avatar Associates.

Real estate managers: Security Capital; Equitec; JMB.

GICs: New York Life.

National Bank of Detroit is master trustee for the plan.

Key personnel in overseeing the fund are Helen Lefler, treasurer; John Steinbach, assistant treasurer-investment management; and Robert Brewer, executive vice president-finance.

Kansas Public Employees Retirement System

	($ millions)
Total assets	1,870
Pension	1,870
Profit-sharing	0
Thrift or savings	0
Employer contributions	102
Benefit payments	77

TOPEKA, Kan. — Early in 1984, the Kansas Public Employees Retirement System replaced its $50 million Standard & Poor's 500 index fund, run by Bankers Trust, with two aggressive equity managers. It allocated $100 million to Pilgrim, Baxter, Hoyt & Greig, and an initial $20 million to Provident Investment Counsel.

In July, the system committed $200 million to buy securities backed by adjustable rate mortgages originating in Kansas.

As of Sept. 30, pension assets increased 5.2% to $1.87 billion from $1.77 billion a year ago.

Equity managers: Capital Supervisors; Investment & Capital Management; Pilgrim, Baxter Hoyt & Greig; Provident; Reimer & Koger.

Bond managers: Robert C. Brown; Investment Management Group; PIMCO; and Reimer & Koger.

Balanced managers: Reimer & Koger.

The pension asset mix was 36.6% stocks, 25.1% bonds, 29% cash equivalents and 8.8% mortgage-backed securities.

The fund has about $11 million invested in real estate equity.

Commerce Bank & Trust, Topeka, is master custodian.

Key investment personnel are Virgil Basgall, chairman of the board of trustees; Marshall Crowther, executive secretary; and Ron Bleidissel, chief accountant.

Kentucky Retirement Systems

	($ millions)
Total assets	1,356
Pension	1,356
Profit-sharing	0
Thrift or savings	0
Employer contributions	77
Benefit payments	51

FRANKFORT, Ky. — During the past year, the Kentucky Retirement Systems hired its first real estate adviser, Heitman Advisory Corp., and invested one-fifth of the projected 5% target the fund has set aside for property.

Total assets grew by 11.8%. Employer contributions grew 2.7% and payments to beneficiaries grew 6.3%. Assets managed in-house grew by 53% to $344 million: $125 million in equities and $219 million in short-term instruments. The fund has $125 million in indexed stocks.

Equity manager: Capital Supervisors.

Bond managers: Capital Supervisors; Loomis, Sayles.

Real estate manager: Heitman.

The approximate asset mix was 35% stocks, 34% bonds, 16% cash equivalents, 1% real estate equity and 14% mortgage-backed securities.

Farmers Bank & Capital Trust is the custodian.

Bobby J. McKee is the investment officer.

Kentucky Teachers' Retirement System

	($ millions)
Total assets	1,485
Pension	1,485
Profit-sharing	0
Thrift or savings	0
Employer contributions	128
Benefit payments	140

FRANKFORT, Ky. — As of Sept. 30, the Kentucky Teachers' Retirement System's pension assets increased 12% to $1.485 billion from $1.325 billion in 1983.

Equity managers: Todd Investment Advisors; Alliance Capital.

Bond managers: Todd Investment Advisors; Alliance Capital.

The pension asset mix is 18% stocks, 58% bonds, 12% cash equivalents, 1% real estate equity, 6% mortgages and 5% mortgage-backed securities.

The Kentucky Teachers' system runs about $118 million in-house, with $100 million in fixed income and $18 million in real estate. Additionally, the fund has about $91 million invested in mortgages.

Farmers' Bank and Capital Trust, Frankfort, is master custodian.

The key investment personnel are Pat N. Miller, executive secretary, and Stuart A. Reagan, investment officer.

March 4: Directory of treasury microcomputer products.

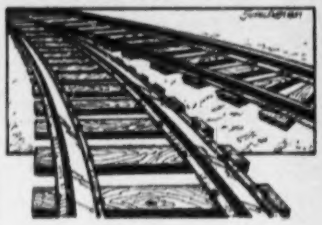
1

Eli Lilly & Co.

	($ millions)
Total assets	902
Pension	594
Profit-sharing	0
Thrift or savings	308
Employer contributions	46
Benefit payments	30

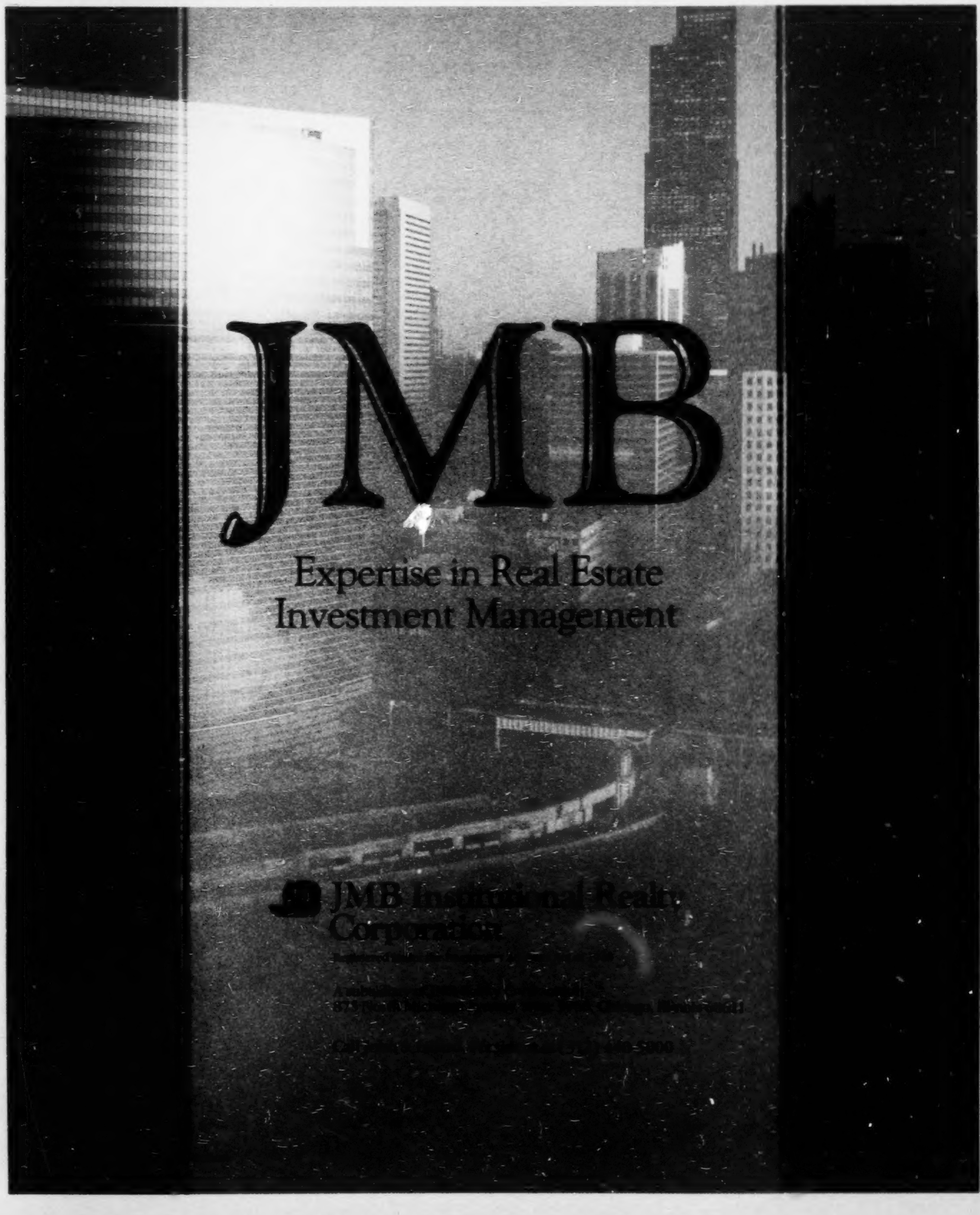
INDIANAPOLIS — J. Michael Maurogordato will be joining Eli Lilly Jan. 1 as manager-employee benefit funds as part of a staff expansion. B.J. Miller became director of investments, and R.B. Graper remains as assistant treasurer.

Total benefit assets of Eli Lilly as of Sept. 30 were $902 million, of which $594 million was in pension assets and $308 million in thrift or savings plan. This is an increase of 13% from the $800 million reported for 1983.



Lilly's 1984 pension contribution was an estimated $46 million, a decrease Mr. Miller attributed, in part, to the fund's dedicated bond portfolio. Benefit payments rose slightly, to $30 million from $28 million.

Equity managers: Batterymarch; Capital Guardian; Trustee & Investor; W.H. Reaves; United Capital Management; Reams Asset Management; Trust Co. of the West; Nicholas Applegate.



Bond manager: American Fletcher Bank.

International managers: Nomura and Nikko.

The asset allocation of the fund as of Sept. 30 was 65% stocks, 9% bonds, 7% cash, 5% real estate equity, 10% GICs, 3% international and 1% venture capital.

The fund has $110 million in two dedicated bond funds and $52 million in GICs. Its $18 million international investment is all in equities.

Northern Trust is master trustee.

Messrs. Maurogordato, Miller and Graper are the key investment personnel.

Lockheed Corp.

	($ millions)
Total assets	4,102
Pension	2,959
Profit-sharing	1,143
Thrift or savings	0
Employer contributions	na
Benefit payments	na

BURBANK, Calif. — The Lockheed Corp. hired two new managers in 1984, Century Capital Associates as an equity manager and Capital Guardian Trust Co. as a domestic and global equity manager. Both were hired for the defined benefit plan.

Total assets for the corporations employee benefit funds increased about 7.7% during the year ended Sept. 30, growing to $4.102 billion from $3.810 billion.

Defined benefit plan managers: Alliance; Anhalt/O'Connell; Bankers Trust; Batterymarch; Bernstein-Macaulay; Capital Guardian; Century Capital; Chase Investors; Citibank; Delaware Investment; First Interstate Bank of California; First Interstate Bank of Washington; Forstmann-Leff; Lombard Odier International; Mellon Bank; Morgan Guaranty; Royal Trust Co.; Security Pacific Investment Managers; Smith Barney; TCW Asset Management; Western Asset Management.

Defined contribution plan managers: Bankers Trust; Delaware Investment; Forstmann-Leff; Manufacturers Hanover; Fayez Sarofim; TCW; Wertheim.

Bankers Trust Co. is the master trustee.

George C. Weintz is investment counsel for the firm.

Los Angeles City Employees' Retirement System

	($ millions)
Total assets	1,061
Pension	1,061
Profit-sharing	0
Thrift or savings	0
Employer contributions	103
Benefit payments	89

LOS ANGELES — The Los Angeles City Employees' Retirement System added six new equity managers in 1984 as the city system sought a further diversification of investment styles. New managers are Alliance Capital, Investment Advisers Inc., M.D. Sass, Nicholas B. Kronwall, Provident Capital and Security Pacific Investment Management.

However, the system ended the third quarter of 1984 with the same percentage of assets in equities as 12 months before: 28%. Also, in 1984, Jerry F. Bardwell was named manager-secretary for the system.

Total assets for the system declined about 4% to $1.061 billion for the 12 months ended Sept. 30.

Other equity managers: Bankers Trust and Loomis, Sayles.

Bond managers: Loomis, Sayles and Favia, Hill.

About $129 million is managed internally — $301 million in equities, $631 million in fixed income and $129 million short-term.

The asset mix as of Sept. 30 was 38% stocks, the system had 62% bonds and 10% in cash equivalents. The system uses stock and bond options. Irving Trust Co. is the master custodian.

Besides Mr. Bardwell, a key person in charge of the fund is Oscar Peters, assistant manager.

Los Angeles County Employees' Retirement Association

	($ millions)
Total assets	4,394
Pension	4,394
Profit-sharing	0
Thrift or savings	0
Employer contributions	303
Benefit payments	303

LOS ANGELES — The Los Angeles County Employees' Retirement Association added three bond and three equity managers in 1984. Bond managers chosen to manage a formerly in-house $1.3 billion bond fund were: Morgan Guaranty Trust Co.; Criterion Investment Management; and Massachusetts Financial Services.

Three new equity managers added, given about $100 million each, were: Pacific Investment Management Corp.; Stein Roe & Farnham; and Loomis, Sayles & Co.

The book value of pension assets increased 10%, to $4.394 billion from $4 billion for the 12-month period ended Sept. 30.

Equity managers: Capital Guardian; Loomis, Sayles; PIMCO; Security Pacific Investment Managers; Stein Roe & Farnham.

Bond managers: Brown Brothers Harriman; Capital Guardian; CMB Investment Counselors; Criterion; Massachusetts Financial; Morgan Guaranty; J.P. Morgan.

The fund has about $10.3 million in equity real estate and another $250 million in mortgages. Its asset allocation as of Sept. 30, was 25% stocks, 53% bonds, 11.4% cash equivalents, 0.2% real estate equity; and 10.4% mortgages.

Security Pacific National Bank is the custodian.

Key persons overseeing the assets of the fund are Richard B. Dixon, Los Angeles County treasurer/tax collector, and Betty Brewer, division chief for portfolio management.

Los Angeles City Fire & Police Pension System

	($ millions)
Total assets	1,449
Pension	1,449
Profit-sharing	0
Thrift or savings	0
Employer contributions	213
Benefit payments	191

LOS ANGELES — The Los Angeles City Fire & Police Pension System's assets increased 4.8% for the 12 months ended Sept. 30, to $1.449 billion from $1.382 billion.

Equity managers: Favia, Hill; Security Pacific Investment; Wright Investors' Service.

Bond managers: Boston Co. and Security Pacific.

As of Sept. 30, the asset mix was 55% stocks, 37% bonds and 8% cash equivalents.

Key personnel overseeing investments are Gary Mattingly, general manager, and Allan Moore, investment officer.

Los Angeles Water and Power Employees' Retirement Plan

	($ millions)
Total assets	1,000
Pension	1,000
Profit-sharing	0
Thrift or savings	0
Employer contributions	105
Benefit payments	100

LOS ANGELES — The Los Angeles Water and Power Employees' Retirement Plan increased its investment in common stock by about 25% in the 12-month period ended Sept. 30, 1984.

The increase followed a 2-year-

The Bostian Associates Quantitative Stock Index Futures Fund returned 201% from inception, August 26, 1983 to December 31, 1984, 80% during 1984.*

The Bostian Associates record was achieved in a period when
- the market was erratic and volatile and
- two thirds of the money managers failed to beat the S&P 500.

The strategies employed are disciplined and utilize the firm's extensive market analysis and computer technology.

The firm has a decade-plus track record of timely economic and investment forecasts. Since 1983, the management effort has emphasized stock index futures which can provide corporate sponsors with diversification by both management style and asset classification.

We invite you to inquire about our Stock Index Futures Partnerships. Contact David B. Bostian, Jr. or Howard Winell.

*The fund is a limited partnership. An audited report will be available by February 1, 1985. Final figures may vary slightly from those above. It is noted that past performance is not necessarily indicative of future returns.

Bostian

Bostian Research Associates, Inc., 360 Madison Avenue, New York, New York 10017 (212) 907-0180

old change in the city charter that allowed city retirement plans to increase their investments in equity. The changes followed extensive public hearings on how to improve investment return for city retirement plans.

Assets for the retirement plan increased 32.6% over a 15-month period ended Sept. 30, to $1 billion from $754 million.

Balanced managers: Trust Co. of the West and Crocker Investment Management.

Both managers are allowed to write options on equity portfolios.

The asset mix as of Sept. 30, was 26% stocks, 53% bonds, 8% mortgage-backed securities and 12% in short-term fixed investments.

Bank of America is custodian.

Key investment personnel are Kathleen Thorton, assistant general manager, and Clarence F. Brawn, investment officer.

Louisiana State Employees Retirement System

	($ millions)
Total assets	1,242
Pension	1,242
Profit-sharing	0
Thrift or savings	0
Employer contributions	115
Benefit payments	160

BATON ROUGE, La. — Louisiana State Employees Retirement System assets rose 14% to $1.242 billion in the year ended Sept. 30, from $1.090 billion a year earlier. The increase resulted from $125 million of interest income and $36 million in net pension contributions after $160 million in benefit payments; the state contributed $115 million; and employees $81 million.

Its realized and unrealized losses totaled about $9 million.

It made no major changes in its investment strategy or managers.

The asset mix was 6% stocks, 65% bonds, 22% cash equivalents, 2% real estate mortgages and 5% mortgage-backed securities.

The fund runs in-house most of the cash equivalents.

Louisiana National Bank is custodian.

Balanced managers: Hibernia National Bank, Security Pacific Investment Managers.

Vernon Strickland is director. Nick Montagnino is assistant investment officer.

The LTV Corp.

	($ millions)
Total assets	2,338
Pension	2,044
Profit-sharing	183
Thrift or savings	111
Employer contributions	na
Benefit payments	na

DALLAS — The LTV Corp. made its third consecutive noncash contribution to its pension fund in 1984, contributing $33 million principal amount of its 14% sinking fund debentures as part of its 1983 plan year contribution.The pension funds of LTV and Republic Steel were consolidated into a single plan in 1984, bringing total pension assets to $2.338 billion, a 53% increase over the $1.526 billion reported by LTV in 1983. LTV and Republic merged in 1984.

Mellon Bank was selected as master trustee following the consolidation. Chase Manhattan Bank was dropped.

Dennis Hamilton, who directed Republic's pension fund, became director of employee benefit fund investments for LTV.

LTV's asset mix as of Sept. 30 was 60% stocks, 20% fixed income, 10% cash, 5% real estate, 2% venture capital and 3% international.

Equity managers: Bankers Trust; Batterymarch; Century Capital; Continental Illinois; Delaware Investment Advisors; Endowment Management; Fidelity International; Forstmann-Leff; Franklin Portfolio; InterFirst Investment Management; Lord, Abbett; MacKay-Shields; Mellon Bank; Mercantile Securities; Morgan Grenfell; National City Bank of Cleveland; Fayez Sarofim.

Bond managers: Manufacturers Hanover and Scudder, Stevens.

Real estate managers: C B Institutional IV; Thomas L. Karsten; Security Capital.

GICs: Hancock; Metropolitan; Travelers.

George H. Simon is director of benefit accounting and administration. Dennis Hamilton is director of employee benefit fund investments.

Marathon Oil Co.

	($ millions)
Total assets	1,271
Pension	566
Profit-sharing	0
Thrift or savings	705
Employer contributions	40
Benefit payments	55

FINDLAY, Ohio — Marathon Oil's pension assets dropped 3.3% during the year. The employer contribution dropped 25.9% and the payout to beneficiaries increased 5%.

The approximate mix of pension assets is 70% stocks, 15% bonds, 5% cash equivalents and 10% annuities. The thrift plan has $337 million invested in GICs. Marathon has $3 million in foreign equity markets.

Marathon gives full discretion to its securities managers to move between stocks and bonds.

Balanced managers: The Boston Co.; Chase Investors; Equitable Investment Management; IDS Advisory; Jennison Associates; Lord, Abbett.

International manager: Chase Investors.

Chase Manhattan is the master trustee.

F.E. Braden, manager, benefits funding, oversees management of the fund.

Issues affecting Taft-Hartley funds will be examined in the April 1 issue.

Pensions & Investment Age offers reprints of all published stories.
For further information on ordering reprints, contact:

Ulla Goldberg
Pensions & Investment Age
220 E. 42nd St.
New York, N.Y. 10017

Ms. Goldberg's telephone number in New York is (212) 210-0124.

This announcement is neither an offer to sell nor a solicitation of an offer to buy these securities.
The offer is made only by the Prospectus Supplement and the related Prospectus.

New Issue / January 10, 1985

$100,000,000

Boise Cascade Corporation

11⅞% Notes Due 1993

Price 99.368% and accrued interest, if any, from January 15, 1985

Copies of the Prospectus Supplement and the related Prospectus may be obtained in any State in which this announcement is circulated only from such of the undersigned as may legally offer these securities in such State.

Salomon Brothers Inc
The First Boston Corporation
Lazard Frères & Co.
Goldman, Sachs & Co.
Kidder, Peabody & Co. Incorporated
Lehman Brothers Shearson Lehman/American Express Inc.
Merrill Lynch Capital Markets
Morgan Stanley & Co. Incorporated
Smith Barney, Harris Upham & Co. Incorporated
Bear, Stearns & Co.
Dillon, Read & Co. Inc.
Donaldson, Lufkin & Jenrette Securities Corporation
Drexel Burnham Lambert Incorporated
E. F. Hutton & Company Inc.
PaineWebber Incorporated
Prudential-Bache Securities
L. F. Rothschild, Unterberg, Towbin
Wertheim & Co., Inc.
Dean Witter Reynolds Inc.
Birr, Wilson & Co., Inc.
Boettcher & Company, Inc.
Dain Bosworth Incorporated
Piper, Jaffray & Hopwood Incorporated
Thomson McKinnon Securities Inc.

Marine Engineers Benefit Association

	($ millions)
Total assets	840
Pension	840
Profit-sharing	0
Thrift or savings	0
Employer contributions	72
Benefit payments	89

BALTIMORE — The Marine Engineers Benefit Association employee benefit fund had total assets of $840 million as of Sept. 30. That was an 11% increase from 1983's $756 million total.

The employee contribution will be $72 million, which represents a 33% decline from the $76 million of the previous year. By contrast, benefits paid out to retirees will be $89 million, or a 187% increase from the $31 million paid out previously.

Roughly 13% of total assets, or $112 million, is managed in-house. Of that, $74 million is in short term securities and $38 million is in GICs.

Kleinwort Benson International Investment, in London, manages $40 million internationally for the fund. Roughly $3.6 million is international equities, $35.7 million is international fixed income, and $0.7 million is other types of international investment.

MEBA uses stock options as a hedging device.

Equity managers: Bear, Stearns; Lazard Freres.

Bond managers: Bear, Stearns; Lazard Freres; U.S. Trust.

The approximate asset mix was stocks, 8.7%; bonds, 17.2%; cash equivalents, 21.2%; real estate equity, 7.9%; mortgages, 1.8%; GICs, 4.6%; other insurance contracts, 38.5%; and miscellaneous investments, 0.1%.

Mercantile Safe Deposit & Trust is master trustee.

Key investment personnel include Lucille Hart, administrator; Gerald Zensky, controller; and Mel Beavers, assistant to the controller.

Martin Marietta Corp.

	($ millions)
Total assets	1,450
Pension	1,150
Profit-sharing	0
Thrift or savings	300
Employer contributions	85
Benefit payments	36

BETHESDA, Md. — In January, the Martin Marietta pension fund sold 500,000 shares of preferred company stock, at $60.63 per share, that Martin Marietta had contributed in 1982 at $50 per share.

Based on year-end 1982 figures, Oppenheimer & Co. has designated the fund as one of the most overfunded in the country.

Martin Marietta made several manager changes during the year. Breau Capital and Torray & Clark were added as equity managers, and Eberstadt Asset Management and Gregg, McKay, Knight & McKay were dropped. Mellon Financial Services was deleted as a fixed-income manager, and the whole option program, which had been run by Chase Investors, Loomis, Sayles and Travelers, was dropped.

Pension assets grew by 4.6% during the year; employer contributions were identical; and benefit payments increased 20%.

The approximate asset mix is 51% stocks, 20% bonds, 21% cash equivalents and 8% GICs. Of the $175 million managed internally, $65 million is equities and $110 million bonds. The fund is $78 million in GICs. Of the $40 million in foreign markets, $38 million is equities and $2 million fixed-income.

Equity managers: Capital Guardian; State Street Research; Van Eck; Breau Capital; Pioneering Management; Torray & Clark.

Bond manager: T. Rowe Price.

Bankers Trust is master trustee.

Wayne H. Shaner, assistant treasurer-pension investment, and Shawn M. Hendon, manager-pension investment, oversee investment management.

Maryland State Retirement & Pension Systems

	($ millions)
Total assets	4,107
Pension	4,107
Profit-sharing	0
Thrift or savings	0
Employer contributions	447
Benefit payments	366

BALTIMORE — The Maryland State Retirement & Pension Systems hired its first outside fixed-income managers in 1984, as it had brought on its first outside equity managers the year before.

The $4.1 billion fund now has 35% of its assets managed externally.

Six managers were picked to run $700 million in fixed income, including: Morgan Stanley, $250 million; Miller, Anderson & Sherrerd, $200 million; and Pacific Investment Management Co., $100 million. Three other firms split the remaining $150 million.

Left out was STW Fixed Income Management, after a disagreement about fees.

The state Legislature also passed a law limiting cost-of-living adjustments for plan participants who started working before 1979.

As of Sept. 30, the fund had grown 9.3%, to about $4.1 billion from the previous year's total assets of about $3.76 billion.

Equity managers: Alliance Capital; Atlanta Capital; Capital Guardian; Dimensional Fund Advisors; Eaton & Howard, Vance Sanders; Hagler; Mastrovita & Hewitt; Hembrecht & Quist; Investment Advisers; Investment Counselors of Maryland; Johnson Valliance & Broadfoot; Loomis, Sayles; MacKay-Shields; Scudder, Stevens & Clark; State Street Research; Tower Capital; and Wellington Trust.

Bond managers: Investment Counselors of Maryland; Mercantile Safe Deposit & Trust; Miller, Anderson & Sherrerd; Morgan Stanley; Pacific Investment Management; and Standish, Ayer & Wood.

Of the $2.67 billion run in-house, $1.59 billion is managed in an indexed equity fund. The remaining $1.08 billion is invested in fixed-income assets.

The asset mix was 55% in stocks; 22% bonds; 11% cash equivalents; 1% mortgages; and 11% mortgage-backed securities.

First National Bank of Maryland is the fund's custodian.

Howard J. France is executive director; Arthur M. Lynch Jr., director-fixed income; and Enos T. Throop Jr., director-equity.

Massachusetts State Employees & State Teachers Annuity Funds

	($ millions)
Total assets	2,400
Pension	2,400
Profit-sharing	0
Thrift or savings	0
Employer contributions	70
Benefit payments	na

BOSTON, Mass. — All Massachusetts state funds are involved in a major restructuring aimed at eradicating the state's unfunded liabilities.

Last December, the state passed a law liberalizing investment restrictions and boosting funding provisions. One outcome of the move was to enable the Massachusetts State Employees and Teachers Funds to increase their equity exposures.

As a result, the funds made five new appointments last September, hiring five Boston firms to run a $100 million portion of assets. The new managers are: Eaton & Howard, Vance Sanders; Gardner and Preston Moss; Standish Ayer & Wood; State Street Research & Management; and Thorndike, Doran, Paine & Wood.

The funds also placed $427 million of assets in a Massachusetts state central investment fund called the Pension Reserve Investment Trust Fund.

Philip D. Kett, formerly chief investment officer for the teachers and employees funds, was named chief investment officer of the new central fund. Alan West, formerly senior investment officer, was named chief investment officer of the state employees and teachers funds.

The funds reported no change in assets during the 12-month period ended Sept. 30, remaining at $2.4 billion.

Equity managers: Eaton & Howard, Vance Sanders; Gardner and Preston Moss; Standish Ayer & Wood; State Street Research; Thorndike, Doran, Paine & Wood.

The approximate asset mix was 10% stocks, 54.7% bonds, 5% cash equivalents, 30% in mortgage-backed securities and 0.3% in GICs.

The Employees Annuity Fund uses the Bank of Boston as master custodian. The Teachers Annuity Fund uses State Street Bank as master custodian.

Alan West is chief investment officer.

McDermott International Inc.

	($ millions)
Total assets	1,037
Pension	836
Profit-sharing	0
Thrift or savings	201
Employer contributions	50
Benefit payments	48

NEW ORLEANS — In 1984, McDermott Inc. made one managerial change, dropping Forstmann-Leff Associates and moving the money in-house.

It also set up a $93 million dedicated bond portfolio, yielding 13%. Altogether, the fund now has $353.8 million in dedicated bond portfolios, all managed in-house.

McDermott's annual pension contribution fell 37.5% to $50 million, a drop the company attributed to a decline in its work force. Its benefits payments were $48 million, up 20% from the $40 million in 1983.

Total employee benefit assets increased 9.7% during the year ended Sept. 30, to $1.037 billion from $945 million a year earlier.

Pension assets rose 8.6% to $836 million from $770 million.

Its employee savings assets totaled $202 million, up 18%.

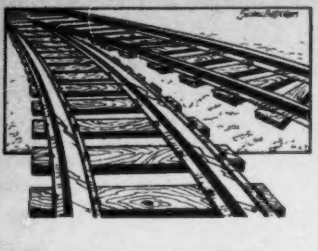
The pension fund asset mix was 25% stocks and 75% bonds.

Most of the pension assets — $631.4 million in bonds and $25 million in equities — is run in-house through McDermott International Investment Co. Inc., Nassau, the Bahamas.

The fund's master trustee is Northern Trust Co.

Sponsors with internal pension fund management
($ millions)

Fund	Assets	Fund	Assets
California Public Employees	$ 22,717	San Francisco City & County	$800
New York State Common	19,959	CIGNA Corp.	778
New York State Teachers	10,688	GTE Service Corp.	750
General Electric Co.	10,501	Sperry Corp.	750
Texas Teachers	9,753	John Hancock Mutual Life Ins. Co.	737
New Jersey Investment Division	9,166	Philadelphia Municipal	735
Michigan State Employees	8,951	United Air Lines	700
Wisconsin State Board	8,692	American Airlines	660
Ohio Teachers	8,507	McDermott International Inc.	656
Ohio Public Employees	8,432	Textron Inc.	612
North Carolina	7,891	Ford Motor Co.	500
U.S. Steel & Carnegie Pension Fund	6,850	The LTV Corp.	500
E.I. du Pont de Nemours & Co. Inc.	6,678	Hawaii Employees	499
Florida State Board	5,909	Operating Engineers, International	488
Georgia State	4,723	Tenneco Inc.	435
New York City Employees	4,540	Armco Inc.	434
University of California	4,206	Allied Corp.	425
Colorado Public Employees	4,108	West Virginia Investment Board	415
Retirement Systems of Alabama	4,095	Dow Chemical Co.	405
IBM Corp.	4,000	Kentucky Retirement Systems	344
U.N. Joint Staff Pension Fund	3,610	Standard Oil Co. (Ind.)	333
Exxon Corp.	3,502	The National Rural Electric Coop.	321
United Technologies Corp.	3,453	U S WEST	313
Tennessee Consolidated	3,400	Arizona State	300
South Carolina	3,036	TRW Inc.	292
Prudential Insurance Co. of America	2,785	Iowa Public Employees	261
Washington State Board	2,700	United Methodist Pension Fund	260
Maryland State	2,667	California State Teachers'	250
Union Carbide Corp.	2,500	ITT	246
Minnesota State Board	2,468	Detroit Retirement Systems	200
Texas Employees	2,459	Mobil Oil	200
Bethlehem Steel Corp.	2,337	Nevada Public Employees	200
Westinghouse Electric Corp.	2,295	Louisiana State Employees	190
Massachusetts State	2,200	Oklahoma Teachers'	180
Oregon Public Employees	2,000	Martin Marietta Corp.	175
Procter & Gamble	1,874	Pennsylvania Public School	166
Metropolitan Life Insurance Co.	1,850	U.M.W. of America	161
AT&T	1,607	L.A. Water and Power Employees	156
Virginia Supplemental	1,583	Bechtel Power Corp.	150
Sears, Roebuck & Co.	1,549	Getty Oil Co.	146
Illinois State Board	1,500	Halliburton Co.	141
Aetna Life & Casualty	1,356	Los Angeles City Employees	129
Chicago Teachers'	1,343	Kentucky Teachers'	118
Alaska State	1,291	L.A. City Fire & Police	118
Ohio Police and Firemen's	1,243	FMC Corp.	116
Connecticut Trust Funds	1,223	MEBA	112
Commonwealth Edison Co.	1,218	Mississippi Public Employees	103
Ohio School Employees	1,168	General Dynamics	100
Citicorp	1,158	Chrysler Corp.	85
Utah State	1,135	Eaton Corp.	84
New York Life Insurance Co.	1,033	Dresser Industries Inc.	80
Deere & Co.	1,030	Indiana Public Employees'	77
The Signal Companies	1,000	Raytheon Co.	70
Southern Baptist Convention	1,000	Teamsters, Central States	70
Grumman Corp	994	Dart & Kraft Inc.	60
Los Angeles County Employees	982	Motorola Inc.	60
Firestone Tire & Rubber Co.	964	Texas Instruments	50
New Mexico Educational	929	Ashland Oil Inc.	35
Arkansas Teachers	924	Philip Morris Inc.	30
Texas Municipal	900	Chevron Corp.	29
Shell Oil Co.	868	Illinois Municipal	20
Teledyne Inc.	848	United Presbyterian Pension Board (USA)	13
Travelers Corp.	838	Boilermakers, Blacksmiths	10
Texas County & District	803	World Bank	5
		TOTAL	$263,847



Equity managers: Delaware Management; BEA Associates; Fayez Sarofim.

Bond manager: Mellon Bank.

Nicholas E. Mezey is president, McDermott International Investment Co.. Larry R. Gibson and Cindy L. Sweeting are investment analysts.

McDonnell Douglas

	($ millions)
Total assets	4,108
Pension	3,074
Profit-sharing	0
Thrift or savings	1,034
Employer contributions	157
Benefit payments	114

ST. LOUIS — In 1984, the McDonnell Douglas fund, which made its first real estate equity investments the previous year, increased its presence in that area, making contributions to RREEF "USA" Fund III and LaSalle Fund II.

Other than real estate, the rest of the investment management lineup remained unchanged from 1983.

As of Sept. 30, the employee benefit assets of McDonnell Douglas were $4.1 billion, a 10% increase over last year's total of $3.7 billion. Contributions, at $157 million, were only a little more than half of 1983's total of $300 million. Benefit payments rose 11.8% to $114 million.

Equity managers: Aetna Capital Management; Bankers Trust; Dimensional Fund Advisors; Treynor, Arbit.

Fixed income managers: Aetna Capital Management; Centerre Trust.

Real estate managers: Trust Co. of the West, Fund I; RREEF, USA Fund III; LaSalle Fund II.

International equity manager: Nomura.

The fund refused to disclose its asset mix.

Bankers Trust is master trustee.

Key personnel are D. Hammerstein, director-retirement funds management, and S.L. Kwiatek, investment analyst.

Merck & Co. Inc.

	($ millions)
Total assets	749
Pension	645
Profit-sharing	0
Thrift or savings	104
Employer contributions	na
Benefit payments	na

RAHWAY, N.J. — As of Sept. 30, Merck & Co. had total employee benefit assets of $749 million, an increase of 3.3% from $725 million a year ago.

The fund has $31 million, about 5%, of its pension assets allocated to international investments. Also, $38.4 million is invested in real estate equity; $2.5 million in oil and gas; and $500,000 in venture capital.

Equity managers: J.P. Morgan; Brundage, Story & Rose; State Street Research; Capital Guardian.

Bond manager: J.P. Morgan.

Real estate managers: J.P. Morgan; Prudential.

International managers: Morgan Guaranty; Capital Guardian; Vanguard.

The approximate asset mix of the pension assets as of Sept. 30 was 64% stocks, 19% bonds, 6% cash equivalents, 6% real estate equity and 5% international.

Bankers Trust is master trustee.

Key personnel overseeing investment management are Alfred P. Smith, treasurer; Lee Hale, assistant treasurer; and Susan Y. Chin, director-pension and benefit investments.

Metropolitan Life Insurance Co.

	($ millions)
Total assets	2,325
Pension	1,850
Profit-sharing	0
Thrift or savings	475
Employer contributions	50
Benefit payments	105

NEW YORK — Metropolitan Life Insurance Co.'s own employees' pension fund assets grew by $54 million during the 12 months ended Sept. 30, to $1.85 billion from about $1.8 billion, an increase of 3%.

Metropolitan reported an additional $475 million in thrift and savings plan assets for employees. The plans had been set up in 1970, but were not reported last year.

Benefits of $105 million were paid out to retirees in 1984. Total employer contributions for the year were $50 million.

Metropolitan Life manages all its assets internally.

The approximate asset mix was 13% stocks, 72% fixed-income, 6% cash equivalents and 9% real estate equity.

Michigan State Employees' Retirement System

	($ millions)
Total assets	8,951
Pension	8,951
Profit-sharing	0
Thrift or savings	0
Employer contributions	na
Benefit payments	na

LANSING, Mich. — The Michigan State Employees' Retirement System increased its venture capital investment $43 million from $18 million during 1984.

Pension assets increased 8.2% during the year ended Sept. 30, growing to $8.951 billion from $8.271 billion a year earlier.

All of the fund's assets are internally managed.

Asset mix for the fund is 44.4% stocks, 36.4% bonds, 4.5% cash equivalents, 0.3% real estate equity, 13.9% mortgages and 0.5% venture capital.

William A. Amerman is director of investments.

City of Milwaukee

	($ millions)
Total assets	814
Pension	814
Profit-sharing	0
Thrift or savings	0
Employer contributions	32
Benefit payments	35

MILWAUKEE — The Milwaukee City Fund had total assets of $814 million on Sept. 30, up 4.2% from 1983. The fund hired two new managers — INVESCO Capital Management for equities and Heritage Investment Management for bonds.

Torray Clark & Co. Inc., another new equity manager, is scheduled to start in 1985.

The asset mix of the fund is 39% stocks, 39.2% bonds, 11% cash equivalents and 10.8% mortgage-backed securities.

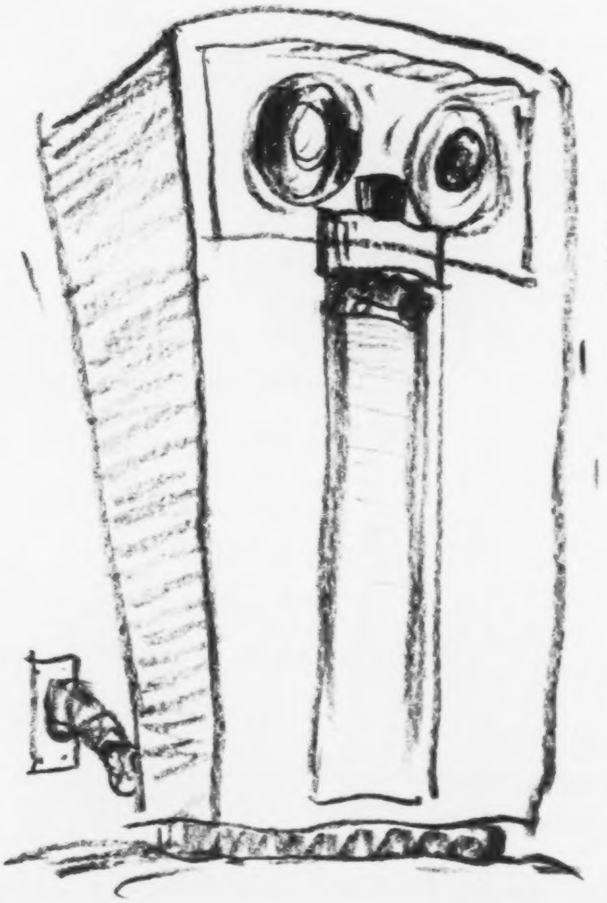
Equity managers: Criterion; Loomis, Sayles; INVESCO.

Bond managers: Criterion; Loomis, Sayles; Heritage; First Wisconsin Trust.

Master trustee is First Wisconsin.

Key personnel for the fund include Robert G. Nehls, secretary and executive director; Duamel Vellon, assistant secretary and assistant executive director; and Chris Foerster, pension account specialist.

A special report on 401(k) plans will be published April 15.



If this is how you see your Master Trustee...

Reports are the lifeblood of any Master Trust service.

But is that all there is to it?

What if you need explanations? Interpretations? What if a glitch arises and you need help confronting the computer?

At Bankers Trust we think you're entitled to flesh-and-blood attention... the personal service, the personal creative planning for you and you alone that only a *Relationship Manager* can give you.

Your Relationship Manager is experienced in the changing complexities of

Minnesota Mining and Manufacturing Co.

	($ millions)
Total assets	1,542
Pension	1,462
Profit-sharing	0
Thrift or savings	80
Employer contributions	118
Benefit payments	41

ST. PAUL, Minn. — 3M added ValueQuest and C-S Capital Advisors as equity managers and deleted Endowment Management and Research from its equity roster.

Employee benefit assets increased about 11.2% during the year ended Sept. 30, growing to $1.542 billion from $1.387 billion a year earlier. Employer contributions increased 31.3%; payouts to beneficiaries, 156.3%. 3M's $1.462 billion pension asset total also includes 501(c)(9) assets.

The approximate asset mix is 67% stocks, 27.5% bonds and cash equivalents, 5% real estate equity and mortgages 0.5%.

3M uses stock and bond option and stock and fixed-income futures. It has invested $84.4 million in foreign stock markets, $60.1 million in equity real estate and $7 million in mortgages.

Equity managers: Alliance Capital; Batterymarch; IDS Advisory; Minnesota Mutual Life; T. Rowe Price; Management Asset; ValueQuest; C-S Capital Advisors.

Bond managers: First Trust Co. of St. Paul; Minnesota Mutual Life; Sun Life; PIMCO; Hoisington Investment Management.

Real estate managers: Citibank; Equitable; RREEF; TCW Realty Advisors; JMB.

Leveraged buy-out fund: Forstmann, Little & Co.

First Trust Co. of St. Paul is master trustee.

Jan Yeomans is manager of the pension fund.

Feb. 4: The annual report of the leading investment banks.

Minnesota State Board of Investment

	($ millions)
Total assets	5,607
Pension	5,607
Profit-sharing	0
Thrift or savings	0
Employer contributions	na
Benefit payments	na

ST. PAUL, Minn. — The Minnesota State Board of Investment put $1.3 billion in an index fund in 1984. The index fund was designed to track the Wilshire 5,000 index. The fund also put $10 million each into two venture capital pools: Summit Ventures and First Century Three Fund of Smith Barney Venture Corp.

The fund had its assets increase 7.8% for a year ended Sept. 30, to $5.6 billion from $5.2 billion a year earlier.

Its asset mix is 55% stocks, 30% bonds, 4% cash equivalents, 10% mortgage backed securities and 1% venture capital and oil and gas. The fund manages $2,468 million internally.

Equity managers: Fred Alger; Alliance Capital; Beutel Goodman; BMI Capital; Forstmann-Leff; Hellman Jordan; IDS Advisors; Investment Advisers; Lieber & Co.; Loomis Sayles; Norwest Bank; Research Management; Siebel Capital; Herbert Smith; Trustee & Investor.

Bond managers: Lehman; Morgan Stanley; Miller Anderson and Sherrerd; Western Asset Management; Northwestern Bank.

Real estate: Prudential; Equitable; Aetna; RREEF; Heitman.

Venture capital managers: Summit; Smith Barney.

State Street Bank is master trustee.

Key personnel include Howard J. Bicker, executive director, and Jeff Bailey, assistant executive director.

A special report on 401(k) plans will be published in the April 15 edition of *Pensions & Investment Age.*

Public Employees Retirement System of Mississippi

	($ millions)
Total assets	1,773
Pension	1,773
Profit-sharing	0
Thrift or savings	0
Employer contributions	231
Benefit payments	94

JACKSON, Miss. — After hiring nine new investment managers in 1983, the Mississippi state retirement system made no management changes in 1984.

The fund runs more than $100 million in-house, of which about 90% is in fixed income assets, and the remainder is in equities.

The funds grew $195 million over the 12-month period ended Sept. 30, an increase of about 12.4%.

The state made contributions of $236 million, and benefits of $94 million were paid out.

Equity managers: Alliance Capital; Eaton & Howard, Vance Sanders; Fayez Sarofim; INVESCO Capital; and Scudder, Stevens & Clark.

Bond managers: Criterion; Dreyfus; Lehman; Mackay-Shields; Manufacturers Hanover; PIMCO; Wentworth, Hauser & Violich.

The asset mix was 15% in stocks, 72.7% in bonds, and 12.3% in cash equivalents.

First National Bank of Jackson is custodian.

Key personnel of the fund are Charles D. Wilkinson C.F.A., deputy director of investment; James H. Dunn, investment manager; and Anne D. Middleton, investment technician.

The Public School Retirement System of Missouri

	($ millions)
Total assets	2,100*
Pension	2,100
Profit-sharing	0
Thrift or savings	0
Employer contributions	111
Benefit payments	110

*as of June 30, 1984

JEFFERSON CITY, Mo. — The total assets of the Missouri Public School Retirement System increased $28 million, or about 1.4%, in the 12-month period ended June to $2.1 billion, from $2.072 billion a year earlier.

The plan paid out benefits of $110 million, and received contributions of $111 million.

Boatmen's National Bank is sole manager and custodian.

The asset mix as of June 30 was 14% stocks, 62% bonds, 7% cash equivalents, 1% mortgages, and 16% mortgage-backed securities.

The key person at the fund is David W. Mustoe, executive secretary.

Mobil Oil

	($ millions)
Total assets	4,000
Pension	3,000
Profit-sharing	0
Thrift or savings	1,000
Employer contributions	150
Benefit payments	400

NEW YORK — In 1984, Mobil joined the ranks of pension funds placing assets in dedicated or im-

© Bankers Trust Company.

talk to us.

the employee benefit business. Your Manager's first task is to study *your* business and learn *your* needs. The aim: to help your defined benefit or defined contribution plan take maximum advantage of our investment and administrative services.

These services make up the most efficient and most comprehensive Master Trust package in the industry. In addition to the basics . . . custody, administration, accounting, reporting, cash management, advisor services . . . . Bankers Trust offers pension disbursing, global custody, securities lending, performance measurement, portfolio comparison, consulting services, and of course on-line information services.

And all of this is backed up by today's most advanced technology. If it exists in the industry, it exists at Bankers Trust. From on-your-desk terminals to reporting that's fast, accurate and as frequent as you need it, Bankers Trust's technology is unsurpassed.

Which brings us back to our point.

The best service is the one that provides a personal link between you and all those machines.

At Bankers Trust, that link is your Relationship Manager

For more information, we invite you to talk directly with Carter P. Reynolds, Vice President, at 212-850-2089.

Bankers Trust Company

Employee Benefit Group

280 Park Avenue, New York, N.Y. 10017

munized bond portfolios, allocating $700 million for that strategy.

As of Sept. 30, employee benefit assets at Mobil Oil totaled $4 billion, a jump of 33.3% over 1983's total of $3 billion. Contributions were $150 million in 1984, down from 1983's $230 million. On the other hand, the $400 million in benefit payments were almost three times higher than 1983's $140 million.

The fund cut back on its international holdings to $50 million. In the survey as of Sept. 30, 1983, the fund reported having $200 million overseas.

During the year, equity manager Putnam Advisory was dropped. Equity manager Jennison Associates, which oversees a portion of the saving plan, was added to the pension fund lineup. Also added were Miller Anderson & Sherrerd and Alliance Capital Management.

Equity managers: Jennison Associates; Miller, Anderson & Sherrerd; Fayez Sarofim; Alliance Capital; State Street Research; Chase Manhattan Bank; Bankers Trust; Capital Guardian; Citibank.

Bond managers: State Street Research; U.S. Trust; Metropolitan; Aetna.

The approximate asset mix of the pension assets as of Sept. 30, 1984, was stocks, 45%; bonds, 33.1%; cash equivalents, 10%; mortgage-backed securities, 5%; and GICs, 6.9%.

The fund has $100 million invested in mortgage-backed securities.

U.S. Trust is master trustee.

Charles Clune is the manager of the benefit funds.

Monsanto Co.

	($ millions)
Total assets	2,200
Pension	1,800
Profit-sharing	0
Thrift or savings	400
Employer contributions	130
Benefit payments	96

ST. LOUIS — The Monsanto Co. had total employee benefit assets of $2.2 billion as of Sept. 30. The pension fund totaled $1.8 billion and a separate thrift or savings plan stood at $400 million.

Total employer contribution for the year is estimated to be $130 million and roughly $96 million will be paid out in benefits to retirees.

No assets are managed internally.

More than a Portfolio Management System

A Business Solution

That's what you get with the in-house DX/V system from Data Exchange. Why?

Control. Produce reviews, reports, analyses, and make on-line inquiries when *you* want.

Flexibility. Let's you strategize your portfolio *your* way.

Confidentiality. Sensitive data never leaves *your* hands.

Ongoing Support. A company of professionals behind you at all times.

Performance. A dual advantage—enhances *your* portfolio management and increases operating efficiency.

A business solution. It's yours from Data Exchange. Give us the opportunity to *prove* it to you.

Data Exchange, Inc.

116 John Street
New York, NY 10038
212-406-7300

About $50 million is in GICs.

The fund has $120 million, or 5% of total assets, invested internationally with three managers, which officials declined to name. Roughly $100 million is in foreign equities and $20 million is committed to international fixed income.

Stock and bond options and stock and bond index futures are used as hedging devices.

About $15 million is invested in oil and gas.

Roughly $160 million is invested in real estate equity and $15 million in mortgages.

Equity managers: Pioneering Management; T. Rowe Price; Delaware Investment; Equitable; Lord, Abbett; Jennison Associates.

Bond managers: Morgan Guaranty; Centerre Trust; Fischer, Francis, Trees & Watts.

The asset mix for the fund was 63% stocks, 25% bonds, 3% cash equivalents, 8% real estate equity and 1% mortgages.

Northern Trust is master trustee.

Key investment personnel are: A.E. Wolfarth, assistant treasurer; R.P. McGahan, manager pension assets; and M.C. Haughey, pension analyst.

Motorola Inc.

	($ millions)
Total assets	905
Pension	273
Profit-sharing	632
Thrift or savings	0
Employer contributions	55
Benefit payments	22

SCHAUMBURG, Ill. — During 1984, Michael Bonner departed from Motorola Inc. Mr. Bonner had been manager of trust investments.

Motorola hired Chase Investors Management Corp. to run a $30 million equity portfolio. The allocation represented 5% of the funds total assets. In an unrelated move, Motorola also terminated Citibank as one of its international investment managers.

The fund increased its assets by 60.5% or $341 million to $905 million from $564 million in 1983. The 1984 asset total includes $50 million in real estate equity, $55 million in international markets and $15 million in GICs.

Motorola runs a $60 million equity porfolio in-house.

Equity managers: Jennison Associates; Lincoln Capital; State Street Research; Capital Guardian; Stein Roe & Farnham.

Bond managers: Brown Brothers; Scudder, Stevens & Clark; Stein Roe.

Real estate managers: Prudential and Equitable.

International managers: Morgan Guaranty; Morgan Grenfell.

The approximate asset mix of the fund assets as of Sept. 30, was 52% stocks, 28% bonds, 5% cash equivalents, 8% real estate equity and 7% international.

Motorola's master trustees are Northern Trust and Harris Bank.

Overseeing the fund's investment operations is Garth L. Milne, vice president and director of treasury.

Funds with indexed assets
($ millions)

Fund	Assets
New York State Common Retirement Fund	$ 4,320
California Public Employees' Retirement System	3,500
New York State Teachers Retirement System	3,164
New York City Employees	2,582
Maryland Retirement & Pension Systems	1,591
Ford Motor Co.	1,400
Minnesota State Board of Investment	1,300
Washington State Investment Board	1,175
Deere & Co.	1,010
Pennsylvania Employees Retirement System	976
Exxon Corp.	927
Sears, Roebuck & Co.	829
Bell Atlantic Corp.	800
Virginia Supplemental Retirement System	482
U S WEST	457
Southwestern Bell Corp.	433
Shell Oil Co.	416
Florida State Board of Administration	343
Arizona State Retirement System	281
Trans World Airlines	274
World Bank	255
Greyhound Corp.	250
United Methodist Pension Fund	205
Ameritech	200
GTE Service Corp.	200
Southern New England Telephone Co.	193
International Union of Operating Engineers	187
Tennessee Valley Authority	180
United Presbyterian Church Pension Board (USA)	160
Sperry Corp.	150
Illinois State Universities Retirement System	138
Utah State Retirement Fund	135
Phillips Petroleum Co.	130
Kentucky Retirement Systems	125
Standard Oil Co. (Ind.)	124
Continental Group Inc.	117
Allied Corp.	100
Florida Power & Light Co.	100
Raytheon Co.	100
San Francisco City & County	100
Pacific Gas and Electric Co.	99
Aluminum Co. of America	96
Inland Steel Co.	91
Illinois Municipal Retirement Fund	81
The LTV Corp.	70
Eaton Corp.	56
Bechtel Power Corp.	50
Sun Co.	47
K mart Corp.	39
Goodyear Tire & Rubber	26
J.C. Penney Co.	25
Chicago Municipal	22
Philip Morris Inc.	15
United Air Lines	9
TOTAL	$30,135

n

National Intergroup Inc.

	($ millions)
Total assets	1,280
Pension	920
Profit-sharing	0
Thrift or savings	360
Employer contributions	68
Benefit payments	60

PITTSBURGH — National Intergroup Inc. set up a $228 million dedicated bond portfolio for Weirton Steel during the year ended Sept. 30. As part of Weirton's sale to its employees, National continues to have pension responsibilities. The dedication is being managed by Alliance Capital Management.

The fund invested in venture capital, dividing $10.5 million between Hambrecht & Quist and Advent of Boston. It dropped Citibank as an equity manager.

Pension fund assets dropped 2.4% to $920 million in the year ended Sept. 30. Annual pension contributions by the sponsor dropped 41% to $68 million; benefit payments fell 40% to $60 million.

The asset mix of the pension fund as of Sept. 30 was 18% equities, 56% bonds, 6% real estate equity, 19% cash equivalents and 1% venture capital.

Equity managers: Dreyfus Management; Brokaw Capital; NSR Asset Management; Value Line Asset Management.

Bond managers: Alliance Capital; Citibank; Centerre Trust; Equitable.

Real estate managers: Equitable; John Hancock Mutual; Prudential.

GIC managers: Equitable; Aetna.

Bankers Trust Co. is master trustee.

Clayton P. Shannon is treasurer.

National Pension Fund for Hospital & Health Care Employees

	($ millions)
Total assets	1,037
Pension	1,037
Profit-sharing	0
Thrift or savings	0
Employer contributions	106
Benefit payments	23

NEW YORK — The National Pension Fund for Hospital & Health Care Employees had employee benefit assets of more than $1 billion as of Sept. 30, 1984, an increase of $152 million or 17% from the $885 million in assets the fund had the previous year.

Sources within the organization estimate employer contributions in 1984 to be about $106 million. Benefits paid to retirees in 1984 were about $23 million.

Balanced managers: Prudential Asset Management; Lehmann Management; Forstmann-Leff; Amalgamated Bank of New York.

The approximate asset mix as of Sept. 30, 1984, was 24.8% stocks, 65% bonds, and 10.2% real estate.

The fund has $105 million invested in real estate, but did not provide a breakdown between equity and mortgages.

The real estate assets are invested in Prudential's PRISA I and PRISA II accounts.

The fund's custodian is Irving Trust.

The key personnel overseeing investment management for the fund are Mortimer Lewart, executive director; Joseph Gonzalez, director of finance and administration; and Roderick Gorham, director of operations.

The National Rural Electric Cooperative Association

	($ millions)
Total assets	1,055
Pension	895
Profit-sharing	0
Thrift or savings	160
Employer contributions	96
Benefit payments	89

WASHINGTON — The National Rural Electric Cooperative Association hired C-S Capital Advisors as an equity manager in 1984, while dropping stock manager Atlanta Capital and bond manager Harris Trust & Savings Bank.

Assets managed internally climbed to $321 million from roughly $200 million the year before.

In addition, the $895 million pension fund split its trust operation into domestic and international parts, picking State Street Bank as co-trustee for its $60 million in foreign assets.

As of Sept. 30, the pension fund increased 8.9% to $895 million from $822 million the year before; thrift plan assets dipped slightly to $160 million from $163 million.

Equity managers: Barrow, Hanley; C-S Capital; Capital Guardian; Chesapeake Capital; Liberty Square; Waite & Correnti; Wilmington Capital.

Bond managers: Capital Guardian and Lincoln Income Group.

International bond managers: Kleinwort Benson and Morgan Guaranty.

GICs: Aetna and Travelers.

The pension asset mix as of Sept. 30 was 53% stocks, 21% bonds, 16% cash equivalents, 3% mortgage-backed securities and 7% GICs.

Wachovia Bank & Trust is the master trustee for domestic assets.

Key investment personnel are Peter Morris, manager of investments; Tom Sowanick, fixed-income portfolio manager; and Joel Oppenheim, senior equity portfolio manager.

Public Employees' Retirement System of Nevada

	($ millions)
Total assets	1,237*
Pension	1,237
Profit-sharing	0
Thrift or savings	0
Employer contributions	108
Benefit payments	93

*as of June 30, 1984

CARSON CITY, Nev. — The Nevada Public Employees' Retirement System hired two equity managers in 1984, giving them $100 million each in an effort to diversify the system's investment styles. Hired were Loomis, Sayles & Co., Los Angeles, and INVESCO Capital Management, Atlanta.

Assets for the system grew 3% to $1.237 billion from $1.200 billion between Sept. 30, 1983, and June 30, 1984.

Equity managers: Loomis, Sayles and INVESCO.

Balanced manager: Criterion.

About $200 million in equity real estate and participating mortgages is managed in-house, and the fund has become limited partner in two venture capital groups, Criterion Venture Partners and Columbine Venture Associates. The system has $5 million committed to venture capital.

The asset mix was 45% stocks, 15% bonds, 1% cash equivalents, 1% real estate equity, 14% mortgages and 24% mortgage-backed securities.

Nevada National Bank is the custodian.

Key personnel in the operation of the system are Will Keating, executive officer; Lawrence Grisson, assistant executive officer; and Laura Wallace, investment analyst.

New Jersey Division of Investment

	($ millions)
Total assets	9,166
Pension	9,166
Profit-sharing	0
Thrift or savings	0
Employer contributions	500
Benefit payments	na

TRENTON, N.J. — The New Jersey Division of Investments was threatened with crippling restrictions during 1984 as a number of bills promoting social investing were proposed in the Legislature.

A provision in one bill would require the system to invest solely in New Jersey companies, and another bill would require divestiture of the stocks of companies doing business in South Africa.

The pension assets of the system grew about 1.5% to $9.1 billion as of Sept. 30.

All of the assets are managed internally with 34% invested in stocks, 46% in bonds, 8% in short-term investments and 12% in mortgage-backed securities.

The fund is overseen by Roland M. Machold, director, and William P. Mooney, deputy director.

New Mexico Educational Retirement Board

	($ millions)
Total assets	929*
Pension	929
Profit-sharing	0
Thrift or savings	0
Employer contributions	54
Benefit payments	47

*as of June 30, 1984

SANTA FE, N.M. — The New Mexico Educational Retirement Board's employee benefit assets totaled $929 million June 30, 1984, 20% more than the $775 million of a year earlier.

The fund is managed internally, with pension investment advice from the firm of Vaughan, Nelson, Scarborough & McConnell, Houston.

The approximate asset mix was 68% bonds, 14% mortgage-backed securities, 10% equities and 8% cash equivalents.

The fund has $132 million in Ginnie Maes.

Citibank, in conjunction with the state treasury, is custodian for the funds.

Investment officers are Bob Short and Pat Griego.

New York City Employees

	($ millions)
Total assets	21,154
Pension	21,154
Profit-sharing	0
Thrift or savings	0
Employer contributions	1,900
Benefit payments	2,200

NEW YORK — William O. Badger, who as third deputy comptroller of the City of New York was responsible for pension fund investments, resigned effective Dec. 31, 1984; no replacement has been named yet.

The New York City Employees Retirement Systems is composed of the city employees fund, the city police fund, the city fire department fund and the city Board of Education fund. The New York City Teachers Retirement System manages part of its assets independently.

The assets of the system increased 7.5% in the year ended Sept. 30, 1984, to $21,154 million, although the fund paid out more in benefits — $2.2 billion — than it received in contributions — $1.9 billion.

The fund has $2,582 million indexed with Bankers Trust Co., and $308 million in GICs for the Teachers Retirement System. It also has $110 million invested in mortgages.

It manages $4,540 million internally, with $1,306 million invested in fixed-income, $3,124 million in cash equivalents and $110 million in mortgages.

During the year, the fund split $1.5 billion between two new fixed-income managers, Fischer Francis Trees & Watts and Pacific Investment Management Co. This was half of the $3 billion that had been managed by Favia, Hill Associates, the investment counseling subsidiary of Chemical Bank.

The fund also added several equity managers — Batterymarch Financial Management; Dimensional Fund Advisors; Lazard Freres; Provident Capital Management; and Stein, Roe & Farnham.

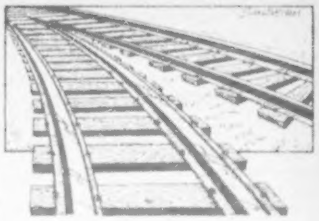
Equity managers: Alliance Capital; Bankers Trust; Batterymarch; BEA Associates; Dimensional Fund Advisors; Forstmann-Leff; Lazard Freres; MacKay-Shields; Oppenheimer Capital; Provident Capital; Stein Roe.

Bond managers: Citibank; Favia, Hill; Fiduciary Trust; Fischer Francis; Lehman Management; Pacific Investment.

Other managers (Teachers Variable Annuity Fund): Alliance Capital; BMI Capital; Bankers Trust; Batterymarch; GeoCapital; Management Asset; McConnell & Miller; Mellon Capital; Prudential; Scudder, Stevens; Tower Capital; Treynor-Arbit; Trinity Investment; Value Line; ValueQuest; Wells Fargo Investment Advisors.

Citibank is the master custodian for the city retirement systems; Rogers, Casey & Barksdale Inc. is consultant to the teachers variable fund.

The key people overseeing the fund are Robert T.C. Wilson, bureau chief; John J. Burns, senior fixed-income analyst; and May Mahr, senior equity analyst.



The key executives for the Teachers Variable Annuity Fund are Wallace Sullivan, executive director, and Patrick Kiernan, assistant executive director.

New York Life Insurance Co.

	($ millions)
Total assets	1,102*
Pension	1,033
Profit-sharing	49
Thrift or savings	20
Employer contributions	43
Benefit payments	37

*P&I Age estimate

Before you commit to a Master Trust product, find out what it means to have a Master Trust service.

When Wachovia developed its first Master Trust service, it was designed to meet the specific and challenging needs of a major corporation. Today that concept of total flexibility continues to serve our clients' needs in a way that has made us a leader in the field.

Our people, through long experience in the Master Trust area, accurately assess the needs of each client. And rather than offer a prepackaged product with costly and needless frills, we mold services to the precise requirements for the optimum administration and management of the account.

In some cases, it has meant applying existing services that we have proven and refined over the years. In others, we have used the full range of our operational technology and financial expertise to create new services that have become standard for the industry.

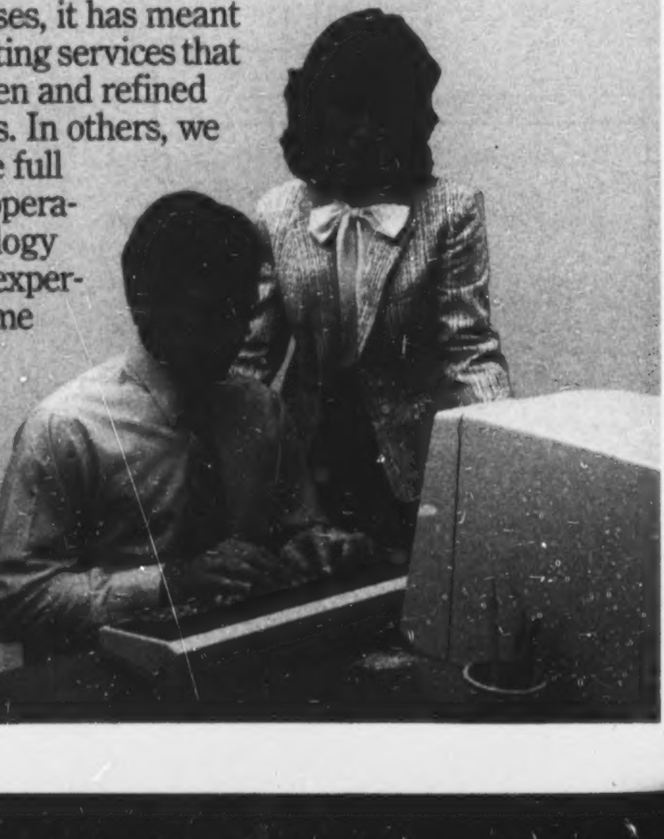
Our commitment for the future is to continue to provide our clients with the most innovative, personalized and cost-effective Master Trust service they can find anywhere.

For more information, call Jane Fisher, VP, (919) 748-6348.

In addition to these Master Trust services normally requested, we will custom design services to meet your individual needs.

- Securities Lending
- Global Custody
- Performance Analytics
- Trust Universe Comparison Service®
- Options/Futures Administration
- Plan Sponsor On-line
- Client Seminars
- 401(k) Administration
- Real Estate Management
- Venture Capital Management
- PAYSOP Administration
- Legal Administration

Wachovia



NEW YORK — *Pensions & Investment Age* estimates the pension assets of New York Life totaled more than $1 billion as of Sept. 30. This is an increase of 10% from the 1983 pension asset estimate of $938 million. The insurer reported $940 million in pension assets as of Dec. 31, 1983, all of it managed internally.

The contribution to the plans will be $43 million in 1984, a dramatic increase from 1983's $12 million. New York Life said 1983's contribution had been unusually low because it had not been required to make a contribution to one of its plans.

The insurer had 95.6% of its pension assets in group annuity contracts in its general account, with 1.6% in a separate bond account and 2.8% in equity real estate.

Trustees of the benefit plans are the master trustees.

Key investment personnel for the fund are Donald K. Ross, chairman; Jacob B. Underhill, president; and George A.W. Bundschuh, vice chairman.

New York State Common Retirement Fund

	($ millions)
Total assets	22,800
Pension	22,800
Profit-sharing	0
Thrift or savings	0
Employer contributions	1,500
Benefit payments	785

ALBANY, N.Y. — The assets of the New York State Common Retirement Fund increased 11.2% in the year ended Sept. 30, to $22.8 billion.

During the year, Eastdil was added as a real estate manager and Morgan Guaranty was dropped as an equity manager.

The fund manages just less than $20 billion internally: $4.5 billion in equities; $10.3 billion in fixed-income; $2.7 billion in short-term investments; and $2.4 billion in other investments.

It has $4.3 billion indexed, $135 million in venture capital, $35 million in real estate equity and $2.6 billion in mortgages.

The asset mix of the fund as of Sept. 30 was 31.7% stocks, 38.2% bonds, 11.6% cash equivalents, 0.1% real estate equity, 11.2% mortgages, 7% mortgage-backed securities and 0.2% venture capital.

Equity managers: Alliance Capital; Bank of New York; Favia, Hill; Lazard Freres; Oppenheimer; L.F. Rothschild; J.& W. Seligman; Shearson Lehman/American Express.

Real estate managers: Eastdil and Goldman Sachs' InProp fund.

Chase Manhattan Bank is the master custodian.

The key investment personnel are Suzanne D. Jaffe, deputy comptroller, and Raymond J. Healy, chief investment officer.

New York State Teachers Retirement System

	($ millions)
Total assets	12,826
Pension	12,826
Profit-sharing	0
Thrift or savings	0
Employer contributions	900
Benefit payments	525

ALBANY, N.Y. — The New York State Teachers Retirement System grew 13.5% in the year ended Sept. 30, 1984.

During the year, the fund hired two equity managers, BEA Associates and Oppenheimer Capital Corp. They were funded with money from Manufacturers Hanover Investment Corp.

Equity managers: Sanford C. Bernstein; Lehman Management; Manufacturers Hanover Investment; BEA; Oppenheimer.

Also during the year the fund committed $50 million to venture capital.

The fund manages $10.7 billion internally, of which $3.1 billion is in an index fund, $6.8 billion in fixed income, $534 million in short term and $144 million in other investments.

The fund has $20 million in real estate equity and $1.5 billion in mortgages.

Harold N. Langlitz is executive director of the fund, Edward J. Reno Jr. is securities investment officer and Lowell A. Blom is mortgage officer.

North Carolina Retirement System

	($ millions)
Total assets	7,967
Pension	7,967
Profit-sharing	0
Thrift or savings	0
Employer contributions	397
Benefit payments	346

RALEIGH, N.C. — The North Carolina Retirement System made its first foray into real estate in 1984, committing $75 million to open-end pools run by Aetna, CIGNA Capital and Goldman, Sachs.

The fund dropped First Union National Bank as its master trustee for equities. Bank of New York, formerly trustee for bonds only, now handles both.

As of Sept. 30, the fund had $7.97 billion in assets, up 13.8% from the year before.

The fund is internally managed but hires outside advisers.

Equity advisers: Alliance Capital; First Citizens Bank & Trust of Raleigh; First Union National Bank; NCNB National Bank; Thorndike, Doran; Wachovia Bank & Trust.

Bond adviser: Duff & Phelps (credit analysis only).

Real estate managers: Aetna; CIGNA; and Goldman.

The fund uses covered call options.

Its asset mix was 20.6% stocks, 68% bonds, 1.4% cash equivalents, 1% real estate equity and 9% mortgage-backed securities.

Overseeing the fund is C. Douglas Chappell, deputy treasury-investment and banking division.

Funds investing in oil and gas
($ millions)

Fund	Assets
Pennsylvania Public School Employees	$259.0
AT&T	175.0
Minnesota State Board of Investment	55.0
Exxon	43.0
Ford Motor Co.	30.0
Honeywell	20.0
Textron Inc.	20.0
Monsanto Co.	15.0
Southwestern Bell	13.0
General Electric Co.	10.0
ITT	10.0
Owens-Illinois	10.0
Tennessee Valley Authority	10.0
Caterpillar Tractor	9.7
Xerox	7.0
Dow Chemical	5.0
Commonwealth Edison	1.7
Eastman Kodak	NA
Eastern Air Lines	NA
IBM Corp.	NA
Martin Marietta Corp.	NA
Massachusetts Employees and Teachers	NA
New York State Common	NA
Pan American World Airways	NA
Southern Co.	NA
U S WEST	NA
TOTAL	$693.4

Funds investing in venture capital
($ millions)

Fund	Assets
General Electric Co.	$ 250.0
AT&T	213.0
U S WEST	150.0
New York State Common	135.0
Goodyear Tire & Rubber	91.1
Honeywell	70.0
Ohio Public Employees Retirement Fund	65.0
Exxon Corp.	56.0
Ford Motor Co.	50.0
New York State Teachers	50.0
Sears, Roebuck & Co.	49.0
Oregon Public Employees	46.0
Minnesota State Board of Investment	45.0
Michigan State Employees	43.0
FMC Corp.	35.0
Conoco	29.0
The World Bank	26.0
Boeing Co.	24.0
Chicago Municipal Employee	21.0
Owens-Illinois Inc.	20.8
Westinghouse Electric Corp.	20.0
Grumman Corp.	19.0
General Foods Corp.	16.6
TRW Inc.	15.2
Colorado Public Employees	15.0
Deere & Co.	15.0
Ohio Police & Fire	15.0
Ohio State Teachers	13.6
Dart & Kraft	13.2
R.J. Reynolds	12.3
Sperry Corp.	12.0
Illinois Board	11.0
National Intergroup	10.5
John Hancock	10.0
Illinois Teachers Retirement	10.0
Ohio School Employees	10.0
Dow Chemical	8.0
Eaton	8.0
Firestone Tire & Rubber	8.0
United Technologies	8.0
Texas Instruments	7.0
Unocal	7.0
Eli Lilly & Co.	6.0
Southern California Edison	6.0
Inland Steel Co.	5.0
Nevada Public Employees	5.0
J.C. Penney Co.	3.0
Standard Oil Co. (Ohio)	3.0
Merck & Co.	1.0
United Presbyterian Board of Pension	0.3
Eastman Kodak	NA
Eastern Air Lines	NA
IBM Corp.	NA
Martin Marietta Corp.	NA
Massachusetts State Employees and Teachers	NA
Pan American World Airways	NA
RCA Corp.	NA
TOTAL	$1,762.6

Northrop Corp.

	($ millions)
Total assets	1,700
Pension	1,110
Profit-sharing	590
Thrift or savings	0
Employer contributions	145
Benefit payments	30

LOS ANGELES — The Northrop Corp.'s employee benefit assets grew almost 10% to $1.7 billion in the year ended Sept. 30.

The company contributed $145 million to the benefit funds in 1984 and expected to pay out $30 million in benefits.

The asset mix as of Sept. 30 was 67% equities, 24% bonds and 9% cash.

Northrop uses no alternative or passive investments in its pension fund.

Equity managers: Capital Guardian Trust; Forstmann-Leff; Putnam Advisory; Rosenberg Capital; Jennison Associates; State Street Research.

Bond managers: Fischer, Francis and Jennison.

Bankers Trust is the master trustee.

Richard B. Lohrer, treasurer, oversees the fund.

NYNEX Corp.

	($ millions)
Total assets	4,400*
Pension	3,500
Profit-sharing	0
Thrift or savings	900
Employer contributions	na
Benefit payments	na

*as of June 30, 1984.

NEW YORK — Total employee benefit assets accumulated at NYNEX since the divestiture of AT&T came to $4.4 billion as of June 30.

Roughly $3.5 billion of that is a master pension trust and $900 million represents a savings plan for salaried employees. These figures were compiled by the 1985 Money Market Directory.

Pension trust managers: American National Bank & Trust; The Boston Co.; Brundage, Story & Rose; Jennison Associates; John Hancock; Manufacturers Hanover Investment; Massachusetts Financial Services; McCowan Associates; State Street Research; Trust Company of the West; U.S. Trust; Wertheim.

Savings plan managers: Bankers Trust; Boston Co. Brown Broth-

acp

American Continental Properties.
A committed real estate firm
joins you as a partner in every investment.

At ACP, we have a unique *investment philosophy*. We believe joint ventures will always outperform investments that are only managed for a fee. We bring more to the table than the typical developer, because we also are coinvestors in every real estate project we structure.

To date, this approach has proven successful for U.S. real estate investments of over 600 million dollars with both private and institutional European and American investors.

We are now offering the special benefits of our professional expertise to U.S. institutional investors. Talk to us today and see how we can grow together. Call Tom Murray or Daniele Bodini at (212) 826-9700.

acp
We perform better...because we invest with you.
AMERICAN CONTINENTAL PROPERTIES
400 Park Avenue, New York, NY 10022

ers Harriman; CIGNA; Oakwood Couselors Inc.

Key investment personnel are Larry Smart, director of finance, and Robert Wyssocki, pension fund manager.

O

Ohio Police and Firemen's Disability and Pension Fund

	($ millions)
Total assets	1,559
Pension	1,559
Profit-sharing	0
Thrift or savings	0
Employer contributions	145
Benefit payments	105

COLUMBUS, Ohio — The Ohio Police and Firemen's Disability and Pension Fund increased employee benefit assets by $138 million or almost 10% during the year ended Sept. 30, 1984.

About $1.2 billion are managed in-house: $901 million in bonds and $342 million in short-term investments.

The public fund made its first commitment to equity real estate at the end of 1983, selecting Trident/Meyer Real Estate Advisors as manager. The fund plans to direct slightly less than 5% of total assets toward equity real estate. However, only $6 million had been invested as of Sept. 30.

Equity managers: Value Line; Travelers Investment; Central National Bank; Duff & Phelps.

The approximate asset mix for the fund was 19% stocks, 41% bonds, 22% cash equivalents, 1% equity real estate, 16% mortgage-backed securities and 1% venture capital.

The $105 million in benefits payments listed above excludes $24 million in health care insurance payments.

Richard Thompson, investment manager, and Theodore Hall, assistant investment manager, oversee fund investments.

Ohio Public Employees Retirement System

	($ millions)
Total assets	8,584
Pension	8,584
Profit-sharing	0
Thrift or savings	0
Employer contributions	600
Benefit payments	520

COLUMBUS, Ohio — The Ohio Public Employees Retirement System increased its assets 11.5%, to $8.6 billion between June 30, 1983, and Sept. 30, 1984. Most of the assets, $8.4 billion, are managed internally, with $1.9 billion in equities, $708 million in short-term investments and $5.7 billion in fixed income.

Equity managers: Value Line.

Real estate managers: Aetna; CIGNA; Wachovia Bank & Trust; Smith Barney.

The asset mix of the fund as of Sept. 30 was 22.8% stocks, 51.9% bonds, 8.2% cash equivalents, 1.7% real estate equity and 15.4% mortgage-backed securities. The fund also has $67 million in venture capital.

Key personnel for the fund include Timothy Getz, real estate manager; Gary Stentz, equity manager; and Mark Delaney, bond manager.

Ohio School Employees Retirement System

	($ millions)
Total assets	1,484
Pension	1,484
Profit-sharing	0
Thrift or savings	0
Employer contributions	107
Benefit payments	131

COLUMBUS, Ohio — Employee benefit assets at the Ohio School Employees Retirement System increased 14% during the year ended Sept. 30, 1984, to just less than $1.5 billion

Almost $1.2 billion of the assets are run internally: $36 million in equities, $746 million in fixed income, $197 million in short-term instruments and $189 million in real estate. Bankers Trust acts as the fund's manager on a non-discretionary basis.

The pension fund has a $10 million commitment in venture capital.

The approximate asset mix for the fund as of Sept. 30 was 24% stocks, 30% bonds, 13% cash equivalents, 9% equity real estate, 4% mortgages and 20% mortgage-backed securities.

The fund's key personnel are R. Jack Cooper, investment officer, and Paul Kubinsky and Robert Cowman, assistant investment officers.

Ohio Teachers Retirement System

	($ millions)
Total assets	8,507
Pension	8,507
Profit-sharing	0
Thrift or savings	0
Employer contributions	468
Benefit payments	527

COLUMBUS, Ohio — The State Teachers Retirement System of Ohio had assets of $8.5 billion Sept. 30, an 8.9% increase from the year earlier. In 1984, the fund sold for $315 million the U.S. Steel building it had bought jointly two years before with the California Employees Retirement System. The sale price was $55 million more than the purchase price.

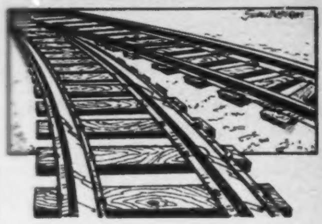
All of the fund's assets are managed internally with Thorndike, Doran, Paine & Lewis as equity and bond consultants and Thomas Karsten Associates as real estate consultants.

Asset mix of the fund as of Sept. 30 was 32% stocks, 28% bonds, 15% cash equivalents, 15% real estate equity and 10% mortgages. The fund has $115 million in a dedicated portfolio and $13.6 million in venture capital.

Key personnel for the fund include Stephen A. Mitchell, director of investments; Robert Leggett, portfolio manager-equities; James M. Meeth, portfolio manager-fixed income; Susan Shumaker, manager-real estate; and Dan Szente, research manager.

Oklahoma Teachers' Retirement System

	($ millions)
Total assets	1,045
Pension	1,045
Profit-sharing	0
Thrift or savings	0
Employer contributions	125
Benefit payments	125



OKLAHOMA CITY — The Oklahoma Teachers Retirement System's assets grew 3.4% during the year ended Sept. 30, 1984, to just more than $1 billion from $990 million.

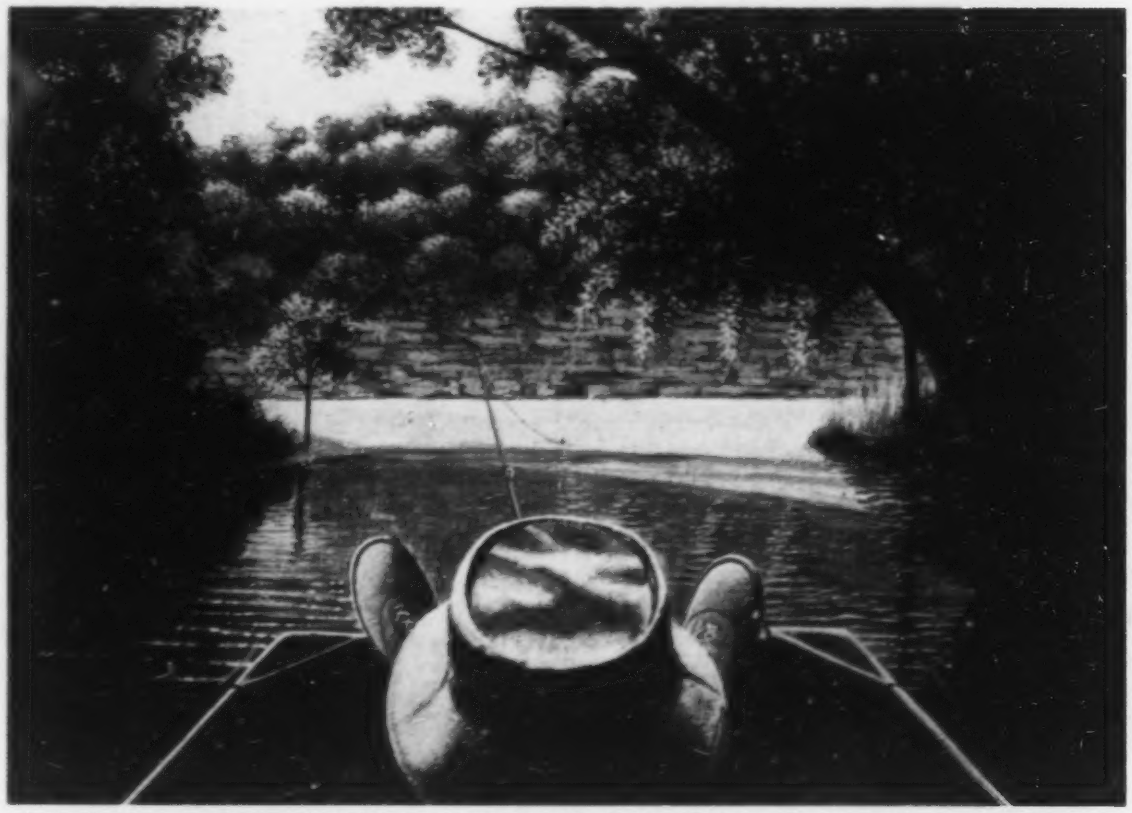
Only $180 million in short-term investments is managed in-house.

Balanced managers: Liberty National Bank & Trust Co.; Tom Johnson Investment; Bank of Oklahoma, Tulsa.

The fund's asset mix is 70.3% bonds, 15% cash equivalents, 9.7% equities and 5% mortgage-backed securities.

Key investment personnel are

Put An End To No Weekends



The leading automated system for 401(K), IRA, PAYSOP and Profit Sharing Plans makes it possible. And probable.

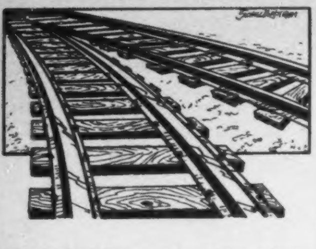
Finally. *Time off.* Because EBAS, The Employee Benefit Administration System, frees up more of your time for weekends—and week nights. Using EBAS you easily handle any type of defined contribution plan: 401(K), IRA, PAYSOP, TRASOP, ESOP, thrift, stock bonus and profit sharing. You can even handle participant loans. EBAS gives you instant access to all the reports you need—from participant statements and payout reports to administrative detail and a complete audit trail.

EBAS brings the benefits of automation right to your fingertips. A single keystroke is all it takes to process activity. In addition, EBAS is modular in design, so you can tailor for *your* specific needs. And buy only what you *really* need.

National FSI is a wholly owned subsidiary of Information Science, Inc. Together we form the total solution for human resource management. Call us today at 214/350-0913 or write 4501 West Mockingbird, Dallas, TX 75209. Also ask about our pension, participant accounting and investment performance systems. We'll help you take it easy.

NATIONAL
FSi
An InSci Company

Enjoy the benefits of National FSI.



Tommy C. Beavers, secretary-treasurer; Jo Witt, investment officer; and Bill Puckett, assistant investment officer.

International Union of Operating Engineers

	($ millions)
Total assets	1,037
Pension	1,037
Profit-sharing	0
Thrift or savings	0
Employer contributions	84
Benefit payments	44

WASHINGTON — The pension assets of the International Union of Operating Engineers totaled more than $1 billion as of Sept. 30, almost a 10% increase from the $944 million reported for 1983.

Employer contributions to the plan for 1984 will be $84 million; $44 million will be paid out in benefits to retirees.

Equity managers: Century Capital Associates; Forstmann-Leff Associates; American National Bank; Dimensional Fund Advisors.

Bond managers: Criterion Investment Management; Lehman Management; Mellon Bank; STW; and State Street Asset Management, which was added in 1984.

Real estate managers: Aldrich, Eastman; AFL-CIO Housing Investment Trust; Union Labor Life.

Other managers: Travelers Insurance; Aetna; Metropolitan Life; Mutual Benefit Life.

The plan runs $487.9 million in-house: $387.9 million in fixed-income and $100 million in short-term investments.

The union fund has $186.5 million in index funds, $132.1 million in dedicated or immunized bond funds and $194.7 million in GICs. It has $1.9 million in real estate equity and $23.6 million in mortgages.

The asset mix as of Sept. 30 was 29.6% stocks, 22.8% bonds, 14.9% in cash, 2.3% mortgages, 11.6% mortgage-backed securities and 18.8% GICs.

State Street Bank is the fund's master trustee.

Jack E. Johnson, director of finance, is the key investment person.

Oregon Public Employees Retirement System

	($ millions)
Total assets	4,200
Pension	4,200
Profit-sharing	0
Thrift or savings	0
Employer contributions	400
Benefit payments	180

SALEM, Ore. — Pension assets of the Oregon Public Employees Retirement System grew 10.5% during the year ended Sept. 30, climbing to $4.2 billion from $3.8 billion.

The Oregon plan added a fourth international manager during the year when it allocated $5 million to Globe Finlay Inc.

The system manages $2 billion in-house, all of it in fixed income.

Equity managers: Batterymarch; BEA Associates; Columbia Management; Froley, Revy; General American; Glickenhaus; Harris Associates; Hotchkis & Wiley; Quest Advisory; Rosenberg Capital; Fayez Sarofim; William Witter.

International managers: Globe Finlay; ABD International; Daiwa; Rowe Price-Fleming.

Venture capital managers: Cable, Howse & Cozadd; Rainier Venture Partners; Menlo Associates; Northwest Venture Partners; New Enterprise Associates; Summit Ventures; Weiss, Peck & Greer.

Real estate manager: Alex. Brown Realty Advisors.

Leveraged buy-outs: Kohlberg Kravis Roberts.

Master trustee is First Interstate Oregon.

James C. George, investment manager, and William Unverzagt, senior investment officer, are the key investment personnel.

Owens-Illinois Inc.

	($ millions)
Total assets	1,400
Pension	1,200
Profit-sharing	0
Thrift or savings	200
Employer contributions	56
Benefit payments	94

TOLEDO, Ohio — The Owens-Illinois pension fund made several manager changes during 1984.

Harbor Capital Advisors, the investment subsidiary of Owens-Illinois, took over the $38.5 million that had been managed in-house and now runs equities, both domestic and foreign, for the fund. Dimensional Fund Advisors was selected as a domestic stock manager and State Street Bank and Jennison Associates were selected for bonds. The Boston Co. and Harris Trust were dropped as bond managers.

In late 1983, Owens-Illinois hired Institutional Petroleum Advisors, a joint venture of Aldrich, Eastman & Waltch and Resource Programs Inc., to structure oil and gas deals. It subsequently changed the arrangement so it now deals directly with Resource Programs.

Total pension assets grew 15.3% during the year ended Sept. 30. Employer contributions declined 17.7% and benefits paid out increased 30.4%. Of the $56 million contributed, $4.2 million was in Owens-Illinois stock.

Of the $116 million invested in foreign markets, $89.7 million is in equities and $26.3 million in fixed income. The fund has committed $20.8 million to venture capital and $10 million to oil and gas; has $100.9 million in equity real estate and $46.6 million in mortgages. Owens-Illinois uses fixed income futures.

The approximate asset mix was 60.8% stocks, 14.7% bonds, 2.9% cash equivalents, 8.4% real estate equity, 3.9% mortgages and 9.3% foreign securities.

Wachovia Bank & Trust is the master trustee.

Key investment personnel are Jerome A. Bohland, senior vice president-finance; Richard W. Lock, treasurer and assistant chief financial officer; and Ronald C. Boller, director-portfolio management and benefit funds.

p

Pacific Gas and Electric Co.

	($ millions)
Total assets	2,068
Pension	1,424
Profit-sharing	0
Thrift or savings	644
Employer contributions	109
Benefit payments	70

SAN FRANCISCO — Pacific Gas & Electric Co. hired two equity managers midyear — Rosenberg Capital Management and Beutel, Goodman Capital Management. The fund also started a bond account with an existing equity manager, Miller, Anderson & Sherrerd.

As of Sept. 30, 1984, Pacific Gas & Electric's total employee benefit assets had increased 7% to just more than $2 billion from $1.9 billion the previous year. Of the total, more than $1.4 billion was in pension assets.

Equity managers: Barrow, Hanley, Mewhinney & Strauss; Beutel, Goodman; Cashman, Farrell; Chase Investors; Endowment Management & Research; Frontier Capital; Jundt/Capen; McCowan Associates; Miller, Anderson & Sherrerd; MPT Associates; Rosenberg Capital; and State Street Bank.

Bond managers: Fischer, Francis; Miller, Anderson & Sherrerd; and T. Rowe Price.

Real estate managers: Corporate Property Investors; Metropolitan; Prudential; RREEF; and TCW Realty.

GACs: Metropolitan Life and Prudential.

Private placements: Prudential.

PG&E has $99 million in an indexed fund, $73 million in GICs and $75 million invested in equity real estate.

The asset mix of the pension fund was 50.9% stocks, 7.5% bonds, 18.5% cash equivalents, 5.3% equity real estate, 4.9% GICs, 10.4% guaranteed annuity contracts and 2.5% private placements.

State Street Bank and Trust is master trustee.

Key investment personnel are Stanley T. Skinner, executive vice president and chief financial officer; Gordon R. Smith, vice president-finance and treasurer; and Janice K. Murphy, director-pension fund management.

Pacific Telesis Group

	($ millions)
Total assets	5,300
Pension	5,300
Profit-sharing	0
Thrift or savings	0
Employer contributions	na
Benefit payments	na

SAN FRANCISCO — The Pacific Telesis Group received an initial allocation of $3 billion in pension assets from American Telephone & Telegraph Co. following the divestiture in 1984, and is slated to receive an additional $2 billion in mid-1985.

On Sept. 30, the asset mix was 55% stocks, 37% bonds and 8% real estate.

PacTel has about $100 million in index funds with Wells Fargo Investment Advisors. The fund uses fixed-income futures.

Late in 1984, PacTel reportedly hired ABD International, Morgan Grenfell, N.M. Rothschild Asset Management and Capital Guardian as international managers.

Equity managers: Chase Investors; Delfi Management; Dodge & Cox; Eberstadt (recently acquired by Alliance Capital); Hotchkis & Wiley; Kemper; Sit Investment; Siegel & Walmsley; United Capital; Mellon Capital.

Bond managers: CMB Investment; Discount Corp. of New York; Dodge & Cox; Kemper; Pacific Investment Management; Rosenberg Capital; Western Asset.

Bank of America is master trustee.

R.E. Holmes is director of investment management. Jeffrey Winter is manager-pension fund.

Pan American World Airways Inc.

	($ millions)
Total assets	1,193
Pension	1,193
Profit-sharing	0
Thrift or savings	0
Employer contributions	70
Benefit payments	155

NEW YORK — Pan American World Airways' employee benefit assets dropped to $1.2 billion from $1.3 billion in the year ended Sept. 30 — an 8% decline.

During the year, Pan Am obtained a temporary restraining order against strikes that were called because the airline planned to freeze workers' pension accruals retroactive to Jan. 1.

Pan Am had deferred pension contributions since 1981. But in 1984, the Internal Revenue Service required the airline to freeze benefit accruals before allowing the company to defer payment of up to $230 million in contributions due Sept. 15, 1984.

Charles Dunn, manager-pensions and investments, declined comment on the status of the situation.

Employer contributions to Pan Am's pension funds totaled $70 million in 1984.

During the year, the pension fund dropped Fayez Sarofim and gave the manager's $60 million equity portfolio to Capital Guardian Trust. It also hired Putnam during the year to run an international equity account.

Equity managers: Bankers Trust; Capital Guardian; Waite & Correnti; Delaware Investment Advisers; Putnam; Reich & Tang; Rosenberg Capital; Citibank; Batterymarch; Trust Company of the West.

Bond managers: Mellon Bank; Rosenberg Capital; Connecticut General Life; John Hancock.

Bankers Trust is Pan Am's master trustee.

The airline has $7 million invested in international equities. Another $130 million is in a dedicated bond fund.

The approximate asset mix as of Sept. 30 was 46% stocks, 48% bonds and 6% cash.

Carl Stillwell, director-pensions and group insurance, and Mr. Dunn oversee investments for the pension fund.

J.C. Penney Co.

	($ millions)
Total assets	1,718
Pension	737
Profit-sharing	981
Thrift or savings	0
Employer contributions	50
Benefit payments	15

NEW YORK — J.C. Penney Co. discontinued its in-house pension investment activities in 1984 and moved the $50 million internal portfolio to outside managers.

The company hired GeoCapital Investment for equities and Lieber & Co. for equities and fixed income. It brought in two international managers, Fidelity and Grantham, Mayo, Van Otterloo.

It also added to its real estate commitments, giving money to RREEF Mid-America/East IV and TCW Realty Advisors II.

Total employee benefit assets increased 3.3% during the year ended Sept. 30, 1984. The company has just less than $1.72 billion in benefit assets: $737 million in pension assets and about $981 million in profit-sharing and savings assets.

Equity managers: GeoCapital; Lieber; Miller, Anderson & Sherrerd; Rosenberg Capital; Tallasi; Torray Clark; State Street Bank.

Bond managers: Lieber & Co.; Miller, Anderson; Rosenberg.

Real estate managers: TCW and RREEF.

GICs: Metropolitan Life.

Venture capital: Sprout Capital Partners and U.S. Venture Partners.

International managers: Fidelity and Grantham, Mayo.

The company has a $25 million index fund for the profit-sharing plan and $190 million in GICs.

Pension fund international and venture capital investments total $27 million and $3 million, respectively. In addition, the company has $76 million committed to equity real estate (the number includes leveraged investments).

The pension plan asset mix was 60% in equities, 15% in bonds, 16% in cash equivalents and 9% in equity real estate as of Sept. 30.

State Street Bank is J.C. Penney's master trustee.

Key investment personnel are Paul Hubbard, vice president and treasurer; Don McKay, assistant treasurer; and Victor Bucchere, benefit plans investment manager.

Pennsylvania Public School Employees Retirement System

	($ millions)
Total assets	6,597
Pension	6,597
Profit-sharing	0
Thrift or savings	0
Employer contributions	609
Benefit payments	613

HARRISBURG, Pa. — In July, the Pennsylvania Supreme Court ruled against legislation to trim state pension costs by decreasing state contributions 1% while raising employee contributions 1.25%. The court ruled the system had to refund the $27 million (plus 4% inter-

TIMBERLAND
The Growing Alternative

WAGNER SOUTHERN FOREST INVESTMENTS, INC.
Registered Investment Advisers
10 Piedmont Center, Suite 420
3495 Piedmont Road / Atlanta, Georgia 30305
Contact: David S. Graham (404) 239-0986

est) it had collected from employees under the law.

An unrelated legislative action passed last year now allows the fund to invest 1% of assets, at book value, in venture capital and limited partnerships.

During the year, Executive Director Andrew Sheffler joined Provident Capital Management. He was replaced by James A. Perry, previously assistant executive director. The fund also hired Clay Mansfield as investment administrator.

The fund dropped bond manager Manufacturers Hanover.

Equity managers: MacKay-Shields; Mellon Bank; Oppenheimer Capital; Provident Capital; State Street Research.

Bond managers: Loomis, Sayles; Mellon Bank; Pittsburgh National Bank.

Real estate managers: Jones, Lang Wootton; Fidelity Bank; Fidelity Bank (mortgages).

The $6.6 billion in pension assets the Pennsylvania School Employee had as of Sept. 30 represents an 11% increase from 1983's $5.9 billion.

During the year, the state contributed $609 million to the fund. Benefits paid out totaled $612.6 million.

The fund has $259 million invested in oil and gas, and $166.1 million in index funds.

The approximate asset mix of the pension assets as of Sept. 30 was stocks, 28.2%; bonds, 42.1%; cash equivalents, 13%; real estate equity, 2.1%; mortgages, 13.4%; and mortgage-backed securities, 1.2%.

First Pennsylvania Bank is the master trustee.

Key personnel involved in investment management are Mr. Mansfield, Mr. Perry and Richard C. Harris, chairman-finance committee.

Pennsylvania State Employees Retirement System

	($ millions)
Total assets	4,453
Pension	4,453
Profit-sharing	0
Thrift or savings	0
Employer contributions	412
Benefit payments	412

HARRISBURG, Pa. — In 1984 the Pennsylvania State Employees pension fund embarked on an aggressive program to bring real estate holdings up to 15% of total assets from its Sept. 30, 1983, holdings of $29 million, or 0.7% of the assets.

As of Sept. 30, 1984, the fund had $277 million, or 6.2% of total assets, invested in real estate equity. The fund has an additional $713 million, or 10.6%, in mortgages and mortgage-backed securities.

Along the way, it gave $30 million to F.I.A. Associates, JMB Institutional Realty and Security Capital Real Estate. During the summer, it also gave $20 million to Aetna Realty Investors; $10 million to Prudential's mortgage pool, MORISA, and $10 million to John Hancock.

At the end of the year, Executive Director Robert Cusma left to join the Illinois Municipal Retirement Fund. Mr. Cusma's replacement has yet to be named. In another personnel change, the fund tapped Gary Sipe in June to replace retiring Edwin Warwick as chief investment officer.

For the first time, the fund selected a full-time investment consultant, Wilshire Associates, which will make recommendations on asset allocation, investment structure, selection and monitoring of investment managers, performance measurement and non-traditional investment options.

The fund also made changes in its fixed-income holdings, naming Payden & Rygel to run $200 million in a short-term, fixed-income portfolio. Also, Mellon Bank's role as an active bond manager was changed to running a $417 million bond index fund.

Reportedly, the fund has committed $25 million to the Pennsylvania MILRITE Council, a private placement fund.

The fund dropped equity manager Mercantile Securities.

Equity managers: Wells Fargo Investment Advisors; Fred Alger; Alliance Capital; Mellon; Trustee & Investors; Barrow, Hanley; Glickenhaus; Trinity Investment.

Bond managers: Mellon; Miller, Anderson & Sherrerd; Payden & Rygel.

Real estate managers: Aetna; Corporate Property Investors; Equitable; F.I.A.; Hancock; JMB; Prudential; Security Capital; Philadelphia Saving Fund Society.

Other managers:: Analytic Investment Management; Balch, Hardy & Scheinman; and Travelers Investment.

The fund had assets of $4.5 billion as of Sept. 30, an increase of 7% from the previous year's $4.2 billion. Contributions totaled $412 million while benefits paid out were $385 million.

Since 1983, the fund more than doubled the amount of assets indexed to $976 million.

The approximate asset mix of the pension assets as of Sept. 30 was stocks, 32.7%; bonds, 16.3%; cash equivalents, 34.2%; real estate equity, 6.2%; mortgages, 6%; and mortgage-backed securities, 4.6%.

The Pennsylvania treasury is the master trustee.

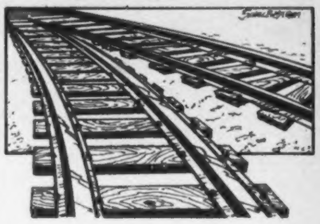
Key personnel involved in investment management are Mr. Sipe and David D. Burnett, investment analyst.

Philadelphia Municipal Pension Fund

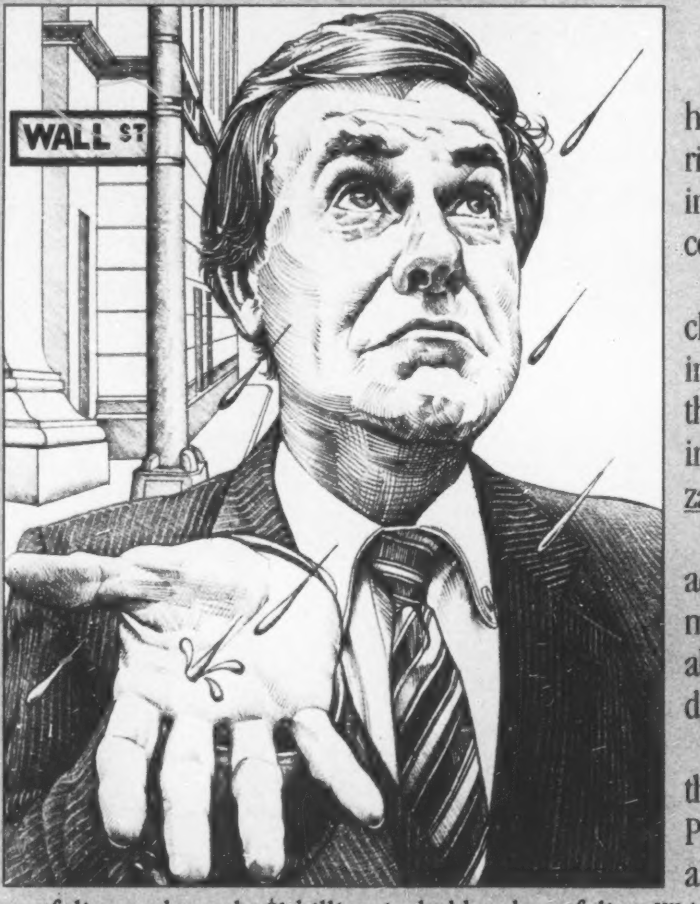
	($ millions)
Total assets	860
Pension	860
Profit-sharing	0
Thrift or savings	0
Employer contributions	137
Benefit payments	145

PHILADELPHIA — The Philadelphia Municipal Pension Fund had 11% more in assets for the year ended Sept. 30, increasing to $860 million from $774 million.

The figures for total employer contribution to all funds and benefits paid to retirees are estimates as of June 30, 1985, the end of the cur-



FIXED INCOME MANAGEMENT FOR PEOPLE WHO HATE SURPRISES.



If there's one thing Prudential has learned managing investment risks for over 100 years, it's that fixed income investors want performance consistent with expectations.

That's why we offer institutional clients a disciplined approach to fixed income management. It's an approach that focuses on three structured fixed income strategies: dedication/immunization, indexing, and laddering.

These strategies capture the advantages of fixed income investments–attractive income and predictable returns–while controlling the disadvantage–surprise results.

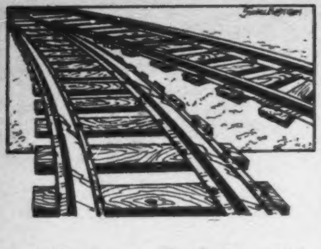
What is not surprising is that they've been so well-received–Prudential is currently managing almost $3 billion in dedicated bond portfolios and nearly $1 billion in laddered portfolios. We've also just introduced one of the first bond index funds.

So if you're looking for fixed income management that achieves results consistent with your expectations, call or write Jim Gately, Senior Vice President, The Prudential Asset Management Company, Inc., 19 Prudential Plaza, Newark, New Jersey 07101, (201) 877-3735.

The Prudential Asset Management Company, Inc.

© 1985 The Prudential Asset Management Company, Inc.

A Subsidiary of The Prudential



rent fiscal year. Employer contributions decreased 3%, to $137 million; benefits paid out increased 7%, to $145 million from $135 million.

Roughly 85% of total assets, or $735 million, are managed in-house. Fixed income comprises $548 million of in-house assets and short-term instruments make up the remainder.

The fund holds about $69 million, or 8% of total assets, in mortgage-backed securities.

Equity managers: Batterymarch; Delaware Investment Advisors; Miller, Anderson & Sherrerd; Putnam Advisory.

The approximate asset mix as of Sept. 30 was 15% stocks, 56% bonds, 21% cash equivalents and 8% in mortgage-backed securities.

Mellon Bank (which merged with Girard Bank) is the master trustee.

Curtis Townsend, deputy director of finance and acting city treasurer, oversees investments for the fund.

Philip Morris Inc.

	($ millions)
Total assets	1,025
Pension	640
Profit-sharing	310
Thrift or savings	75
Employer contributions	110
Benefit payments	20

NEW YORK — Philip Morris added Morgan Grenfell and dropped Siebel Capital Management for equities, and added Scudder, Stevens & Clark for bond management.

Pension assets grew 12% for the year ended Sept. 30; employer contributions for 1984 were up 5.8% and benefit payouts were down 28.6%.

The approximate asset mix was 50% stocks, 30% bonds, 17% cash equivalents and 3% real estate equity.

The in-house investment staff manages $30 million in equities.

Philip Morris has $15 million in an index fund with State Street Bank & Trust, $45 million in dedicated bonds and $150 million in GICs. Also, $25 million are in offshore equity markets and $20 million are in equity real estate.

Equity managers: State Street Research & Management; BEA Associates; Rosenberg Capital; Glickenhaus; Favia Hill; Morgan Grenfell; GeoCapital; Hellman Jordan; Roanoke; Bankers Trust.

Bond managers: Scudder Stevens; State Street Bank and Bankers Trust.

Real estate managers: JMB Institutional; Prudential.

GICs: Equitable.

State Street Bank is the master trustee.

The key personnel are Herbert Millington, deputy treasurer, and Mary Lee Calimano, manager-financial service.

Phillips Petroleum Co.

	($ millions)
Total assets	2,055
Pension	1,464
Profit-sharing	0
Thrift or savings	591
Employer contributions	0
Benefit payments	74

BARTLESVILLE, Okla. — Phillips Petroleum Co. had employee benefit assets of $2.055 billion as of Sept. 30, 1984. This is an approximate 8% increase from the $1.906 billion reported the previous year.

Employer contributions to retirement plans at Phillips were eliminated for 1984 because of the overfunded status of the plan, according to treasury officials. Phillips added Forstmann Little as a fixed-income manager, Rogers, Casey & Barksdale for equities and RREEF for real estate in 1984 and dropped T. Rowe Price for equities.

Phillips has $130 million in indexed funds, $160 million in GICs and $30 million in international equities.

Equity managers: Citibank; Morgan Guaranty; MacKay-Shields; Capital Guardian; Barrow, Hanley; Wells Fargo; Travelers; Rogers, Casey & Barksdale.

Fixed income: Metropolitan; Citibank; Forstmann Little; MacKay-Shields; Equitable; Travelers; Aetna.

Real estate: Morgan Guaranty; JMB; RREEF; Aetna; Victor Palmieri.

The asset mix as of Sept. 30 was 60% stocks, 6.1% real estate, 1.9% mortgages, 11% GICs and 21% other.

Citibank is master trustee.

Key investment personnel are R.E. Bonnell, vice president and treasurer; C.B. Friley, assistant treasurer; and G.R. Barnett, director-pension investments.

PPG Industries

	($ millions)
Total assets	1,070
Pension	717
Profit-sharing	0
Thrift or savings	353
Employer contributions	40
Benefit payments	64

PITTSBURGH — PPG Industries' total employee benefit assets grew 5% to $1,070 million for the 12 months ended Sept. 30, 1984.

During the period, the company made its first foray into the international equities markets, allocating a total of $14 million to Schroder Capital Management and Morgan Grenfell.

Also in 1984, the fund shuffled its bond managers replacing Brown Brothers Harriman with Pittsburgh National Bank and adding Minton/Newbold's Capital Management.

The company has $340 million in a dedicated or immunized bond fund, and set up a 401(k) plan.

Equity managers: BEA Associates; Equitable; Lipper Analytical Services; Neuberger & Berman; Smith Barney Harris Upham.

Bond managers: The Boston Co.; Equitable; Pittsburgh National; Minton/Newbold's; Prudential.

GICs: Prudential.

International managers: Morgan Grenfell; Schroder.

The approximate asset mix of pension assets as of Sept. 30 was 45% stocks, 46% bonds, 5% cash equivalents, 2% real estate equity and 2% GICs.

Mellon Bank is the master trustee.

Key personnel are L.M. Call, treasurer; Denis W. Chipman, director-pension fund administration; and R. Thomas, assistant treasurer.

Procter & Gamble

	($ millions)
Total assets	1,886*
Pension	12
Profit-sharing	1,874
Thrift or savings	0
Employer contributions	146
Benefit payments	na

*as of June 30, 1984

CINCINNATI — Procter & Gamble's employee benefit assets increased 7% in the 12 months ended June 30, 1984, according to the 1985 Money Market Directory.

Of the total employee assets, 62% is in company stock, with 8% in cash equivalents and 30% in GICs.

The primary retirement plan at Procter & Gamble is a defined contribution plan.

GICs: Aetna.

Cash manager: T. Rowe Price; Northern Trust.

The key investment personnel

from ugh to ~~VOGUE~~!

On the leading edge of low P/E investment technology.

PROVIDENT CAPITAL MANAGEMENT INC.

"The original low P/E investors."

For information, contact: Andy Sheffler, 1500 United Engineers Building,
30 South 17th Street, Philadelphia, PA 19103 • Tel: 215-561-6000

are E.H. Eaton, treasurer, and R.R. Bidwell, assistant treasurer.

Prudential Insurance Co. of America

	($ millions)
Total assets 2,785 Pension	2,785*
Profit-sharing	0
Thrift or savings	0
Employer contributions	50
Benefit payments	110

*P & I Age estimate

NEWARK, N.J. — The employee benefit assets for Prudential Insurance Co. of America totaled $2.6 billion as of Dec. 31, 1983. *Pensions & Investment Age* estimates the assets had grown to $2,785 million as of Sept. 30, 1984.

Employer contributions to the fund should be $50 million for 1984, and benefits paid out to retirees should be $110 million, according to company estimates.

All assets are managed in-house.

International investments totaled $269 million, or roughly 10% of total assets, as of Dec. 31, 1983. About $226 million of that was in equities and $43 million in fixed income.

The approximate asset mix was stocks, 52%; fixed income (including mortgages) 19%; cash equivalents, 10%; and real estate equity, 19%.

Investment decisions for the pension fund are made by a committee of three senior officers.

r

Raytheon Co.

	($ millions)
Total assets	1,150
Pension	1,100
Profit-sharing	10
Thrift or savings	40
Employer contributions	100
Benefit payments	40

LEXINGTON, Mass. — Raytheon Co.'s pension funds joined an increasing number of tax-exempt funds investing in stock index futures in 1984.

Raytheon put $10 million into one of State Street Bank and Trust Co.'s stock index futures funds.

Also, Raytheon chose Boston Safe Deposit and Trust Co. as master trustee for two pension funds that total about $750 million. Raytheon did not use a master trustee previously.

Raytheon's employee benefit assets totaled $1.1 billion Sept. 30, 1984, down 6% from the $1.2 billion total of a year earlier.

Equity managers: Batterymarch; State Street Research; Dewey Square (First National Bank of Boston); Morgan Guaranty Trust; Bankers Trust; State Street Bank; Fidelity; Fourth National Bank of Wichita; Provident Capital; Wall Patterson McGrew and Hamilton; Massachusetts Mutual Life; Merchants National Bank of Cedar Rapids; John Hancock.

Bond managers: Dewey Square; Morgan Guaranty; Fourth National Bank of Wichita.

Real estate managers: Bank of Boston; Morgan Guaranty; John Hancock; Aetna.

About $70 million is managed in-house: $45 million in equities, $15 million in fixed income and $10 million in short-term investments.

The funds have $100 million indexed, $110 million in dedicated or immunized bond funds, $20 million in GICs, $60 million in real estate equity and $6 million in foreign equities.

There are no investments in venture capital, oil and gas or mortgages.

The asset mix is 60% equities, 25% bonds, 5% real estate equity, 2% cash equivalents, 2% GICs and 6%

in an insurance company general account.

Key investment personnel are Herbert Deitcher, vice president and treasurer, and W. Bruce Livingston, manager-employee benefits financing.

RCA Corp.

	($ millions)
Total assets	2,500
Pension	2,000
Profit-sharing	0
Thrift or savings	500
Employer contributions	na
Benefit payments	na

NEW YORK — RCA hired Bankers Trust Co. as its master trustee and later dropped the Frank Russell Co. as investment management consultant. For the year ended Sept. 30, RCA's pension assets increased 5.2% while thrift plan assets increased 25%.

While the company declined to disclose amounts, it uses real estate,

Investment Counsel Association of America

50 BROAD STREET • NEW YORK, NEW YORK, 10004 • (212) 344-0999

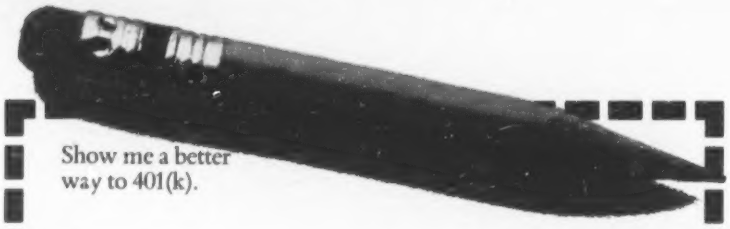
A professional organization founded in 1937 consisting of more than 100 experienced investment counsel firms with a common purpose to establish and encourage the highest professional and ethical standards.

Is Your Investment Manager a Member?

Literature and membership list available on request.

INVESTMENT COUNSEL ASSOCIATION OF AMERICA

The time to think seriously about a 401(k) plan is before you start one.



Show me a better way to 401(k).

Name ____________ Title ____________

Company ____________

Address ____________

City ____________ State ____________ Zip ____________

No. of employees ____________ Phone (   ) ____________

Mail to: The Travelers, One Tower Square, Group Pensions, 7MS, Hartford, CT 06183

Not after.

Otherwise, things can get awfully tough on your nerves.

Because even the simplest 401(k) plan is really quite complicated. And as various investment opportunities are added, its complexity can become staggering.

Without the proper support, what was conceived as an employee benefit can become a benefit manager's nightmare. That's why, at The Travelers, we do more than just manage 401(k) plans.

We start with plan design. Our people have the expertise to fully analyze a company's needs and objectives and then custom tailor a plan to match. We offer a broad range of investment alternatives, from guaranteed interest contracts to aggressive common stock funds, including certain investment strategies unique to The Travelers.

But let's face it, the key to success is service. And this is where The Travelers can really make the difference.

The Travelers was managing complex, individualized benefit programs long before 401(k) plans even existed.

What's more, employee participation is as important to us as it is to you. As a result, we offer a full spectrum of communications and solicitation materials.

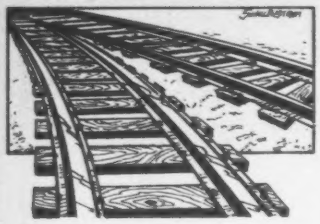
Now that you know what we're doing about 401(k) plans, isn't it time you talked to The Travelers?

For complete details on a better way to 401(k), simply send us the coupon above, or call Tom Keating, Vice President, at (203) 277-7777.

The Travelers

"Full Service"
Total Money Managers

The Travelers Corporation and its Affiliated Companies, Hartford, CT 06183



international investment, stock index futures and fixed-income futures.

Managers (according to the 1985 Money Market Directory): Aetna; Batterymarch; Chase Investors; Citicorp Investment; Endowment Management & Research; Equitable; Fidelity International; First Chicago Investment Advisors; John Hancock; Morgan Guaranty; T. Rowe Price; Prudential Asset Management; N.M. Rothschild International; Fayez Sarofim; Scudder, Stevens; State Street Research & Management; and Travelers.

Bankers Trust; Equitable; and Metropolitan Life for the thrift plan.

Pamela W. McCann, assistant treasurer and staff vice president, oversees the fund.

R.J. Reynolds Industries

	($ millions)
Total assets	1,582
Pension	1,203
Profit-sharing	12
Thrift or savings	367
Employer contributions	52
Benefit payments	55

WINSTON-SALEM, N.C. — The R.J. Reynolds Industries pension fund assets decreased 1.6%, to $1.2 billion for the year ended Sept. 30, because a subsidiary, Sea-Land Industries, was spun out, taking $69 million in pension assets with it into a newly formed, separate plan.

Employer contributions decreased 45.7% while benefit payments decreased slightly.

During the year, R.J. Reynolds absorbed equity managers Bernstein-Macaulay and Connecticut Bank & Trust from the savings plan of Heublein, a corporate acquisition, and deleted Analytic Investment Management, CIGNA, Dreyfus Managment and E.M. Graves, which had worked for Heublein, and Fayez Sarofim, Forstmann-Leff Associates and Independence Investment Associates, which had worked for Del Monte Corp., another corporate acquisition.

The pension fund is contemplating moving in-house about $100 million in stock and bond assets that now are managed externally.

Gwain H. Gillespie, chief financial officer and senior vice president, was promoted to executive vice president-finance and administration.

The fund has $297.1 million in dedicated bonds, $12.3 million in venture capital and $47.8 million in equity real estate. It uses fixed income futures.

Equity managers: Batterymarch; Capital Guardian; Delaware Investment; MacKay-Shields; Reich & Tang; Warburg Pincus. For the savings plan: Wilkens & Nanovic; Alliance; Bernstein-Macaulay; Connecticut Bank & Trust.

Bond managers: Pacific Investment Management; Scudder, Stevens; Morgan Guaranty; Wachovia Bank & Trust.

Real estate manager: Wachovia.

Guaranteed annuity contract: John Hancock.

The approximate asset mix as of Sept. 30 was 55.7% stocks, 30.3% bonds, 9% cash equivalents, 4% real estate equity and 1% venture capital.

Wachovia is the master trustee.

The key investment personnel are Mr. Gillespie; John W. Dowdle, treasurer and vice president; and Gene H. Hoots, director-fund management.

Rockwell International

	($ millions)
Total assets	4,900*
Pension	3,672
Profit-sharing	0
Thrift or savings	1,228
Employer contributions	255
Benefit payments	na

*as of June 30, 1984

PITTSBURGH — Rockwell International's total employee benefit assets increased 16% to $4.9 billion as of June 30, 1984, according to the 1985 Money Market Directory. *Pensions & Investment Age* estimates pension assets increased to $3.7 billion and the employee savings plan to $1 billion. Insured retirement plans are estimated to have $150 million.

Managers (according to the MMD): Beutel Goodman; Capital Guardian; Cashman, Farrell; Chase Investors; CIGNA; First Interstate of California; First Pacific Advisors; Guardian Life; Hotchkis & Wiley; InterFirst Bank of Dallas; Metropolitan Life; PRIMECAP; Fayez Sarofim; Scudder, Stevens & Clark; Seattle First National; Security Pacific National; Security Peoples Trust; Stralem; TransAmerica Investment; Travelers; Waite & Correnti; Western Asset Management.

Savings plan managers are Fiphron & Myers, Los Angeles; National Bank of Detroit; Sarofim; Stralem; Western.

E.W. Alstaetter, staff vice president-pensions, insurance and risk management, oversees the fund.

S

Sandia National Laboratories

	($ millions)
Total assets	764
Pension	764
Profit-sharing	0
Thrift or savings	0
Employer contributions	19
Benefit payments	20

ALBUQUERQUE, N.M. — Sandia National Laboratories hired equity manager Capital Guardian, and replaced Bradford Trust as master trustee with Northern Trust during 1984.

Its pension assets rose a slight 1.8% to $763.8 million in the year ended Sept. 30.

Sandia Labs, a defense-related researcher, is a unit of AT&T Technologies; its pension assets are managed separately.

Equity managers: Delaware Investment Advisers; Eberstadt; Capital Guardian; Pioneering; Putnam.

Bond manager: Putnam.

Real estate managers: Prudential; Equitable.

Insurance general account: Prudential.

Its asset mix was 57.5% stocks, 25.1% bonds, 6.5% cash equivalents, 8.9% real estate equity, 2% mortgage-backed securities.

Homer Pierce is manager of benefits and Charles Mika is supervisor of benefits planning and pension fund management.

City and County of San Francisco Employees Retirement System

	($ millions)
Total assets	1,700
Pension	1,700
Profit-sharing	0
Thrift or savings	0
Employer contributions	184
Benefit payments	135

SAN FRANCISCO — In mid-year, the San Francisco fund hired four fixed-income managers. MacKay-Shields Financial was given $125 million; Lehman Management, $75 million; and Bankers Trust Co. and Scudder, Stevens & Clark, $50 million each.

Also, DeWitt F. Bowman joined the system as chief investment officer from the California Canadian Bank in San Francisco. He replaced Jack E. Stoufer who resigned to join the California teachers' system.

For the year ended Sept. 30, 1984, pension assets increased just more than 6% to $1.7 billion from about $1.6 billion. Of the total assets, $800 million is invested in-house in fixed income.

Equity managers: Crocker Investment Management; Eaton Vance; Loomis, Sayles; George Springman.

Bond managers: Bankers Trust; Lehman Asset; MacKay-Shields; Scudder, Stevens.

Real estate manager: Coldwell Banker.

Index manager: Great American Core Investors.

The pension asset mix was 22% stocks, 46% bonds, 15% cash equivalents, 5% real estate equity and 12% mortgages.

Bankers Trust Co. is master custodian.

The fund had $100 million in an indexed fund, $90 million invested in real estate equity and about $200 million in mortgages.

Key investment personnel include Mr. Bowman and Diane Gale, assistant chief of investments.

Sears, Roebuck & Co.

	($ millions)
Total assets	4,808
Pension	1,549
Profit-sharing	3,259
Thrift or savings	0
Employer contributions	na
Benefit payments	na

CHICAGO — Sears, Roebuck & Co. had $4.8 billion in assets as of Sept. 30, 1984.

The asset mix of the fund is 47.9% stocks, 34.7% bonds, 5% cash equivalents, 2.3% real estate equity, 7% international, and 3.1% venture capital. The fund has $829 million indexed.

All of the fund's assets are managed internally by Sears Investment Management Co.

Continental is master trustee for the fund.

Key personnel are David V. Dootson, president, and Michael Norton, vice president.

Shell Oil Co.

	($ millions)
Total assets	4,517
Pension	2,016
Profit-sharing	200
Thrift or savings	2,290
Employer contributions	160
Benefit payments	300

HOUSTON — Shell Oil Co. completed a billion-dollar purchase of 15 GICs in 1984 bringing the total investment in GICs to $1.342 billion. Total assets of the employee benefit program at Shell increased 15.6% for the year ended Sept. 30, 1984, to $4.517 billion from $3.907 billion.

Shell manages $888 million internally, $137 million in equity and $751 million in fixed income.

The fund has $416 million indexed.

Equity managers: Wells Fargo; State Street Research; Dodge & Cox; Kemper Financial; Equitable Life; Fayez Sarofim; Criterion; First City National Bank; Mellon Bank.

Bond manager: Texas Commerce Bank.

Real estate managers: Prudential; John Hancock; Aetna; Equitable.

GICs: Metropolitan; Travelers; New York Life; Aetna; John Hancock; Equitable; Prudential.

The asset mix of the pension fund as of Sept. 30 was 49% stocks, 27% bonds, 3% cash, 13.1% real estate, 0.5% mortgages, 4.4% mortgage-backed securities and 3% GICs.

R.S. MacIntire is plan administrator.

The Signal Companies

	($ millions)
Total assets	1,500
Pension	1,000
Profit-sharing	0
Thrift or savings	500
Employer contributions	na
Benefit payments	33

LA JOLLA, Calif. — Total market value of The Signal Companies employee benefit assets was $1.5 billion as of Sept. 30, 1984, which represents no increase in assets from the previous year. Roughly $1 billion are pension assets, with the remainder in an employee savings and stock purchase plan.

In late 1983, the company dedicated its entire pension fund, setting up a $1 billion dedicated bond portfolio to be managed in-house with the help of Wilshire Associates Inc., in Los Angeles. This was done to consolidate the 52 separate employee benefit plans that resulted from Signal's merger with Wheelabrator-Frye.

To accomplish the dedication, Signal took assets from 12 of its money managers. The dropped money managers are Abel Noser; Alliance; First Pacific Advisors; Criterion; Lincoln Capital; Loomis, Sayles; TCW Asset Management; Transamerica Investment; Towneley Capital; MacKay-Shields; Martin Currie; Jennison.

The dedication was done at a 12% rate, with the entire portfolio invested in U.S. Treasury bonds. It was estimated the move would save the company an $250 million in employer contributions in the next five years.

Roughly $33 million will be paid out to retirees in 1984.

The employee savings and stock plan is managed by outside managers.

Equity managers: TCW; Lincoln Capital; Towneley Capital; AmSouth Bank; Wells Fargo Investment Advisors.

Bond managers: Transamerica.

GICs: John Hancock.

The Signal Cos. holds no international investments, venture capital, or oil and gas investments.

Chase Manhattan Bank is the master trustee.

Key investment personnel are Andrew J. Chitea, senior vice president; R.W. Ranch, vice president;

"FLEXIBILITY"

A KEY TO SUPERIOR INVESTMENT PERFORMANCE.

Superior investment performance is achieved by anticipating change in the investment environment Bessemer's flexible investment approach permits it to adapt quickly to change and produce consistent performance through all phases of the market cycle.

Bessemer's equity performance ranked in the top 25% of equity funds measured by A.G. Becker for 9 out of 10 of the cumulative periods through 1982.

To learn more, call or write Robert C. Elliott, Executive Vice President, Bessemer Trust Company, N.A., 630 Fifth Avenue, New York, NY 10111, (212) 708-9141.

Bessemer Trust

Affiliated with Bessemer Trust Company, New Jersey and Bessemer Trust Company of Florida

M.I. Stern, senior vice president; Walter D. Sanborn, vice president.

South Carolina Retirement System

	($ millions)
Total assets	3,036
Pension	3,036
Profit-sharing	0
Thrift or savings	0
Employer contributions	151
Benefit payments	131

COLUMBIA, S.C. — Total assets for the South Carolina Retirement System grew more than 14% in the 15 months ended Sept. 30, 1984.

The majority of the funds are invested in bonds and mortgage-backed securities; there are no equity holdings.

The assets are managed in-house, but Jamison, Eaton & Wood acts as an investment adviser.

In 1984, contributions to the fund totaled $151 million and benefits totaled $131 million.

The asset mix was 74% in bonds, 7% in cash equivalents and 19% in mortgage-backed securities.

Key personnel are Grady L. Patterson Jr., state treasurer, and Shakun Tahiliani, investment director.

Southern Co.

	($ millions)
Total assets	1,294
Pension	1,029
Profit-sharing	0
Thrift or savings	265
Employer contributions	72
Benefit payments	30

ATLANTA — The Southern Co.'s employee benefit assets as of Sept. 30, 1984, were $1.3 billion, up 3.5% from the previous year. Contributions were $72 million, down from 1983 payments of $95 million.

Balanced managers: Bankers Trust; Citizens & Southern National Bank; First Atlanta; AmSouth; Trust Company Bank.

Real estate managers: Citizens & Southern; First Atlanta; Trust Company Bank.

GICs: Aetna; Travelers; MONY; New England Life.

The approximate asset mix of the pension assets as of Sept. 30 was stocks, 57%; bonds, 29%; cash equivalents, 9%; real estate equity, 0.7%; and GICs, 4.3%.

There is no master trustee.

Key personnel involved in overseeing the investment management of the funds are George B. Campbell, financial vice president, and Ormond W. Frazier, assistant treasurer.

Southern Baptist Convention

	($ millions)
Total assets	1,300
Pension	1,300
Profit-sharing	0
Thrift or savings	0
Employer contributions	65
Benefit payments	36

DALLAS — The Annuity Board of the Southern Baptist Convention started phasing out its maturing GICs in 1984, moving the assets into internal bond management.

Previously, the fund had nearly 40% of its assets in GICs. Only three of the fund's six GIC managers remain, although the fund declined to identify them. Managers listed in last year's survey were Aetna; Travelers; Metropolitan Life; John Hancock; Mutual Benefit Life; and Union Mutual Life. Additional insurance contracts will mature in 1985.

Stanley D. Morrow, who became the fund's chief investment executive in midyear, also has beefed up the internal bond staff. About $1 billion in pension assets, including bonds and GICs, are run in-house.

The fund dropped real estate manager Gladstone Associates.

Equity managers: Alliance Capital; Capital Guardian; Morgan Guaranty; Thorndike, Doran, Paine & Lewis; J. & W. Seligman.

Bond manager: Morgan Guaranty.

As of Sept. 30, the asset mix was 20% stocks, 65% bonds and GICs, 10% cash equivalents and 5% mortgages and real estate lease-backs.

RepublicBank Dallas was hired as master trustee, replacing Fiduciary Trust Co.

Mr. Morrow oversees the fund investments.

Southern California Edison

	($ millions)
Total assets	1,175
Pension	743
Profit-sharing	0
Thrift or savings	432
Employer contributions	73
Benefit payments	49

ATLANTA — Assets for the Southern California Edison fund increased 15.5% to $1.2 billion as of Sept. 30, 1984.

DYNAMIC OPTION OVERRIDING:

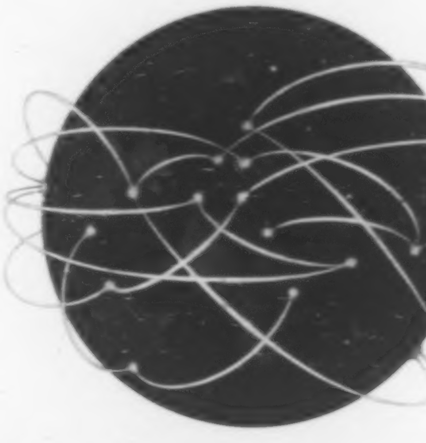
1. PROVIDES INCREMENTAL RETURNS
2. REQUIRES NO CASH INVESTMENT
3. DOES NOT INTERFERE WITH STOCK MANAGER
4. REDUCES STOCK MARKET RISK

Balch, Hardy & Scheinman, Inc.

INVESTMENT COUNSELORS

"The Options Manager"

501 FIFTH AVENUE, NEW YORK, NEW YORK 10017. (212) 661-6290



"Information about money is becoming almost as important as money itself. That's why we developed CitiBanking.®"

From The Citi of Tomorrow℠...CitiBanking today.

How much to invest? Where to invest? When to invest? The right information at the right time can make a crucial difference to your company. The difference between investment success and failure, profit and loss.

CitiBanking gives you that information. Accurately, reliably, electronically. In seconds, you can get current money market rates. Up-to-the-minute foreign exchange summaries and exposure analyses. Cash availability analyses. And more. All with remarkable ease.

Only CitiBanking gives you real-time access to your accounts in over 33 countries—for information *and* transactions.

CitiBanking gives you unmatched security, too. Because you communicate with Citibank offices around the world through our own private financial telecommunications network.

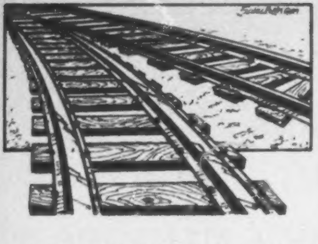
To find out how your company can benefit from the world's most advanced electronically delivered financial services, call your local Citibank Account Manager. You'll get the services you need to make the most of your company's money, day after day.

WELCOME TO THE CITI℠

CITIBANK CITICORP®

GLOBAL ELECTRONIC BANKING

© 1984 Citibank, N.A. Member FDIC



Asset mix for the fund was 55% stocks, 25% bonds, 1% cash equivalents, 1% real estate equity and 17% GICs. The fund had $15 million in international equities and $130 million in GICS.

Equity managers: Batterymarch; Denver Investment; Pacific Investment; Rosenberg; Waite and Correnti; Wentworth, Hauser & Violich.

Bond managers: Pacific Investment Management; Rosenberg.

Real estate manager: Pacific Mutual Realty.

International manager: Batterymarch.

GICs: Connecticut Mutual; John Hancock; Massachusetts Mutual; Metropolitan Life; Northwestern National Life.

Master trustee for the fund is Security Pacific National Bank.

Key personnel include Michael L. Noel, vice president and treasurer, and Lynda L. Faber, assistant treasurer.

Southern New England Telephone Co.

	($ millions)
Total assets	930
Pension	830
Profit-sharing	0
Thrift or savings	100
Employer contributions	40
Benefit payments	40

NEW HAVEN, Conn. — Southern New England Telephone reported $930 million in total employee benefit assets as of Sept. 30, 1984, an increase of 7.7% from 1983's $863 million. Of the $930 million, $830 million were pension assets, an increase of 5.7% from 1983.

Contributions to both the pension and savings plans in 1984 were $40 million; $40 million will be paid in benefits.

Equity managers: American National Bank; Capital Guardian; Connecticut National Bank; Analytic Investment Management; Trustee & Investors; Rollert & Sullivan; Barrow, Hanley. For the savings plan: Wells Fargo.

Bond managers: CIGNA; Connecticut National; Equitable.

Real estate managers: CIGNA; Security Capital Real Estate Corp.

Balanced manager: Atalanta/Sosnoff.

As of Sept. 30, the asset mix of pension assets was 63% stocks, 22% bonds, 12% cash and 3% real estate equity.

Southern New England has $193 million of its benefit assets in index funds and $71 million in GICs; $20 million is invested in real estate equity.

The fund uses stock options.

Boston Safe Deposit and Trust is the master trustee.

In 1984, Terry O. Oulundsen was promoted to vice president of regulatory matters from secretary and treasurer. He was succeeded by E. William Kobernusz.

Mr. Kobernusz and Jean M. LaVecchia, assistant secretary and assistant treasurer, are the key investment personnel.

Southwestern Bell Corp.

	($ millions)
Total assets	3,590
Pension	3,172
Profit-sharing	0
Thrift or savings	418
Employer contributions	193
Benefit payments	201

ST. LOUIS — Southwestern Bell Corp. had $3.6 billion in assets as of Sept. 30, 1984.

Equity managers: RepublicBank Dallas; Interfirst Dallas; Boatmen's National; First City, Houston; Texas Commerce.

Bond managers: Jennison; Republic Bank; Interfirst Dallas; Boatmen's National; First City; Texas Commerce; Brown Brothers Harriman.

Real estate manager: AT&T's TREET.

Its asset mix was 61% stocks, 38% bonds and 1% other investments.

Master trustees for the fund are RepublicBank Dallas and Bankers Trust.

Key personnel include L.C. Bailey, executive vice president and chief financial officer; R.M. Geschwind, vice president finance and treasurer; and R.W. Wohlert, assistant treasurer.

Sperry Corp.

	($ millions)
Total assets	1,461
Pension	1,461
Profit-sharing	0
Thrift or savings	0
Employer contributions	na
Benefit payments	60

NEW YORK — The Sperry Corp. pension fund had total assets of $1.5 billion as of Sept. 30, 1984.

Benefits paid out to retirees are estimated at $60 million for 1984.

Sperry has a 401(k) plan with assets of $693 million as of Sept. 30.

Roughly 51% of the total assets, $750 million, are managed in-house by the company's money management subsidiary, Sperry Capital Management. Of that, $600 million is in stocks, $115 million in fixed income, $25 million in short term and $10 million in other investments.

Balanced managers: Thorndike, Doran; Travelers Investment; Metropolitan Life; INVESCO; T. Rowe-Price; and Sperry.

Roughly $150 million are indexed. Sperry has $5 million in international equity investments, which are managed in-house.

The fund uses stock options and has a $12 million commitment to venture capital.

As of Sept. 30 the asset mix was 65% stocks, 27% bonds and 8% in cash equivalents.

Chase Manhattan Bank is master trustee for the pension fund.

William Rechter, president of Sperry Capital Management, oversees the fund.

Standard Oil Co. (Ind.)

	($ millions)
Total assets	3,144
Pension	1,629
Profit-sharing	0
Thrift or savings	1,515
Employer contributions	210
Benefit payments	240

CHICAGO — In 1984, John S. Ruey replaced David E. Tierney as administrator manager-investments at the fund. Mr. Tierney left to start an investment analysis consulting firm.

The fund added several new managers during the year, including Fidelity Management Trust, Franklin Portfolio Associates, McKenzie Walker Investment Management and Solomon Asset Management. It no longer uses Stein Roe & Farnham.

Its assets increased 5.3% to $3.1 billion as of Sept. 30, 1984. Internally managed assets totaled $333 million with $275 million in equity, $18 million in short-term and $40 million in fixed income.

The fund has $140 million indexed, $92 million in international investments, $87 million in real estate equity and $9 million in mortgages.

Equity managers: Dimensional; Chase Manhattan; CMB Investment Counselors; Forstmann-Leff; Fayez Sarofim; State Street Research & Management; Fidelity; Franklin Portfolio; McKenzie Walker.

Bond managers: Hoisington; Pacific Investment Management; Solomon.

Real estate manager: Equitable.

Its asset mix as of Sept. 30 was 66% stocks, 15% bonds, 9% cash equivalents, 5% real estate equity and 5% other.

Chase Manhattan Bank is master trustee.

Key personnel include Philipp W. Binzel, assistant treasurer of investment, and Mr. Ruey.

Standard Oil Co. (Ohio)

	($ millions)
Total assets	1,240
Pension	839
Profit-sharing	334
Thrift or savings	67
Employer contributions	135
Benefit payments	112

CLEVELAND — The Standard Oil Co. (Ohio) pension fund raised its assumed rate of return in 1984 to 8% from 7%.

The $1.2 billion in assets reported as of Sept. 30, 1984, was down $55 million or 18.6% from the previous year.

Equity managers: Fred Alger; Investors Research; Jennison; National City Bank; Bernstein-Macaulay; MacKay-Shields; Value Line; Pioneering Management; Templeton Investment Counsel; United Capital.

Bond managers: U.S. Trust Co.; Robert C. Brown; Miller, Anderson & Sherrerd.

Real estate managers: FNB Chicago; John Hancock; Smith Barney; TCW Real Estate.

GIC managers: Metropolitan Life; Mutual of New York.

Asset mix for the fund as of Sept. 30 was 60% stocks, 32% bonds and 8% real estate equity.

The fund reported $28 million in GICs, $63 million in real estate equity and $3 million in venture capital. It does invest overseas, but the amount was not available.

Bankers Trust is master trustee.

Michael A. Williams, assistant treasurer and director of pension investments, oversees investments.

Sun Co.

	($ millions)
Total assets	1,381
Pension	1,105
Profit-sharing	0
Thrift or savings	276
Employer contributions	na
Benefit payments	75

RADNOR, Pa. — Sun Co. Inc. added several new equity managers and two international managers in 1984. The equity managers included Management Asset, Sanford C. Bernstein, Helman Jordan and BMI. Morgan Guaranty and G.T. Capital were added as international managers. The fund dropped MacKay-Shields as an equity manager and also dropped Frank Russell Trust and Wilmington Trust as GIC managers.

Equity managers: Miller, Anderson & Sherrerd; Wells Fargo; Analytic Investment Management; Bankers Trust; Jennison; Management Asset; Sanford Bernstein; Helman Jordan; BMI.

Bond managers: Fischer, Francis; Massachusetts Financial; Morgan Guaranty.

International managers: Capital Guardian; G.T. Capital; Warburg Investment Management International; Fidelity Investment Management; Morgan Guaranty.

GICs: Aetna; Hancock; Metropolitan Life; New York Life; Travelers.

Asset mix of the fund as of Sept. 30, 1984, was 54.5% stocks, 17.7% bonds, 4.2% cash equivalents; 14.2% real estate equity and 9.4% GICs.

Bankers Trust is the master trustee.

Harry P. Davis Jr., director benefit plans-investments, and R.L. Veith, manager-benefit plans financial administration, oversee the management of the fund.

Teamsters, Central States, Southeast and Southwest Areas Pension Fund

	($ millions)
Total assets	5,169
Pension	5,169
Profit-sharing	0
Thrift or savings	0
Employer contributions	618
Benefit payments	593

CHICAGO — In 1984, Morgan Stanley Inc., as named fiduciary of the Teamsters, Central States fund dropped four managers and hired four fixed-income managers, shifting almost $1 billion.

It dropped equity managers Century Capital and Forstmann-Leff, spliting their assets among the five remaining equity managers.

Also, it dropped fixed-income managers Equitable and Massachusetts Financial Services, hiring four replacements — Fiduciary Trust, Morgan Guaranty, Miller Anderson & Sherrerd and T. Rowe Price.

It retained Eastdil and Thomas L. Karsten Associates to help liquidate some real estate assets.

This January, the Labor Department denied Morgan Stanley's request to run the fund's equities. The company now will have to use outside managers for its restructuring of equities, meaning the shifting of possibly $3 billion in 1985.

Pension assets rose 5.8% to $5.169 billion in the year ended Sept. 30, 1984.

The asset mix was 37% stocks, 33% bonds, 15% cash equivalents,

Lynch, Jones & Ryan
Independent Research World

INDEPENDENT RESEARCH WORLD is a monthly newsletter designed to keep institutional investors current and knowledgeable about what's new, what's available, what's been enhanced in the world of independent investment research.

FUTURE ISSUES

If you would like to receive INDEPENDENT RESEARCH WORLD, please send a note on your company letterhead to:
Mary Alice Morton
Managing Editor

Lynch, Jones & Ryan has long provided the best in economic, fundamental, technical, quantitative and strategic approaches to investment decision-making.

Mary Alice Morton, Managing Editor
Independent Research World
Lynch, Jones & Ryan
325 Hudson Street
New York, NY 10013
(212) 243-3137

SIPC

I/B/E/S at a glance
INSTITUTIONAL BROKERS ESTIMATE SYSTEM

- Forecast earnings estimates are provided for the companies followed by Wall Street—currently over 3,200 companies.
- Data items for each company provide for five years of annual estimates, four quarters of quarterly estimates and a five year long term growth forecast.
- More than 2,000 Analysts at over 100 Research Brokerage Firms contribute earnings estimates to I/B/E/S.
- Quarterly Estimates — available in the **Monthly Summary Data Book**, on Diskettes and Computer Time-Sharing Services.
- **I/B/E/S PLUS**—Custom Reports to Your specifications.
- **ELECTRONIC I/B/E/S**—Computer tapes, MICRO/SCAN™ on microcomputers and time-sharing access to I/B/E/S.

FREE the current issue of the **I/B/E/S MONTHLY COMMENTS** highlighting trends and developments in earnings estimate forecasts.

Lynch, Jones & Ryan

For full details about I/B/E/S and your free Monthly Comments, write to Jo-Ann Larsen on your company stationery:
Lynch, Jones & Ryan
325 Hudson St., New York, NY 10013
or call Jo-Ann Larsen at (212) 243-3137

2% real estate equity, 8% mortgages and 5% mortgage-backed securities.

Included in the Central States bond allocation are dedicated and immunized bond portfolios totaling $1.030 billion.

The Central States staff runs $70 million in short-term investments in-house.

Equity managers: Alliance Capital; BEA Associates; Equitable; MacKay-Shields; McCowan Associates.

Bond managers: Lincoln Income Group; Mellon Bank; Putnam Advisory; State Street Bank; Fiduciary Trust; Morgan Guaranty; Miller Anderson & Sherrerd; T. Rowe Price.

Real estate managers: Equitable; Victor Palmieri.

The fund, under court agreement, appointed Morgan Stanley named fiduciary in January 1984, giving it authority to determine investment policy and managers. State Street Bank & Trust is the custodian.

The key personnel at Morgan Stanley involved with the fund are Barton M. Biggs and Gordon S. Gray.

At the fund, George W. Lehr is executive director and Terrence S. Moloznik is director of asset monitoring.

Teamsters, Western Conference

	($ millions)
Total assets	5,129
Pension	5,129
Profit-sharing	0
Thrift or savings	0
Employer contributions	450
Benefit payments	390

SEATTLE — The Western Conference of Teamsters Pension Trust Fund sold its $1.5 billion common stock portfolio in 1984 to put the money in bonds. The move was part of a plan to dedicate most of the trust assets by 1986, with hopes of eliminating all of its unfunded liability.

It also dropped two equity managers, Aetna Life and Equitable Life.

Assets for the trust increased 10% for the year ended Sept. 30, 1984, to $5.1 billion from $4.7 billion.

The trust's sole manager is Prudential.

Its asset mix as of Sept. 30 was 16.7% stocks, 14.4% bonds, 13.1% cash equivalents, 12.3% equity, 2.4% mortgaged-backed securities and 41.1% in Prudential's general account, which is primarily fixed-income investments.

The trust has $632 million in equity real estate and $2.8 billion in dedicated or immunized bond funds.

James H. Gately, senior vice president at Prudential Asset Management, is the key person overseeing investment of pension trust assets.

Teledyne Inc.

	($ millions)
Total assets	848*
Pension	848
Profit-sharing	0
Thrift or savings	0
Employer contributions	na
Benefit payments	na

*as of June 30, 1984

LOS ANGELES — Teledyne Inc. had $848 million in employee benefit assets as of June 30, according to the Money Market Directory. That is a 14% increase from the $742 million *Pensions & Investment Age* estimated the fund had as of Sept. 30, 1983.

All employee benefit assets are managed in-house.

The approximate asset mix as of June 30 was 38% stocks, 58% bonds and 4% cash equivalents.

Key investment personnel are H.E. Singleton, chairman of the board and senior investment officer, and C.E. Rinse, vice president, secretary and treasurer.

Tenneco Inc.

	($ millions)
Total assets	1,800
Pension	1,200
Profit-sharing	0
Thrift or savings	600
Employer contributions	135
Benefit payments	115

HOUSTON — Tenneco pulled $100 million in-house in 1984, bringing its pool of internally run assets to $435 million.

At the same time, three bond managers were dropped — Hoisington Investment, TCW Asset Management and U.S. Trust.

Tenneco added four management firms during the year. STW Fixed Income Management and CM&M Asset Management were given fixed-income accounts, while Dimensional Fund Advisors and Pilgrim, Baxter, Hoyt & Greig were brought in as equity managers.

Total employee benefit assets climbed about 14% for the year ended Sept. 30, 1984, to $1.8 billion from just less than $1.6 billion.

Equity managers: Batterymarch; Criterion; Delaware Investment Management; IDS Advisory; Dimensional; Pilgrim Baxter.

Bond managers: RepublicBank Houston; State Street Research and Management; STW; CM&M.

About $65 million in equities and $370 million in fixed income are managed internally through Tenneco Asset Management.

The asset mix of Tenneco's pension fund as of Sept. 30 was about 40% stocks, 49% bonds and 11% cash equivalents.

RepublicBank is the company's master trustee.

Key investment personnel are Dan Watson, president of Tenneco Financial Service; E.L. Jaroski, senior vice president, Tenneco Financial; and Alan Stewart, vice president, Tenneco Financial.

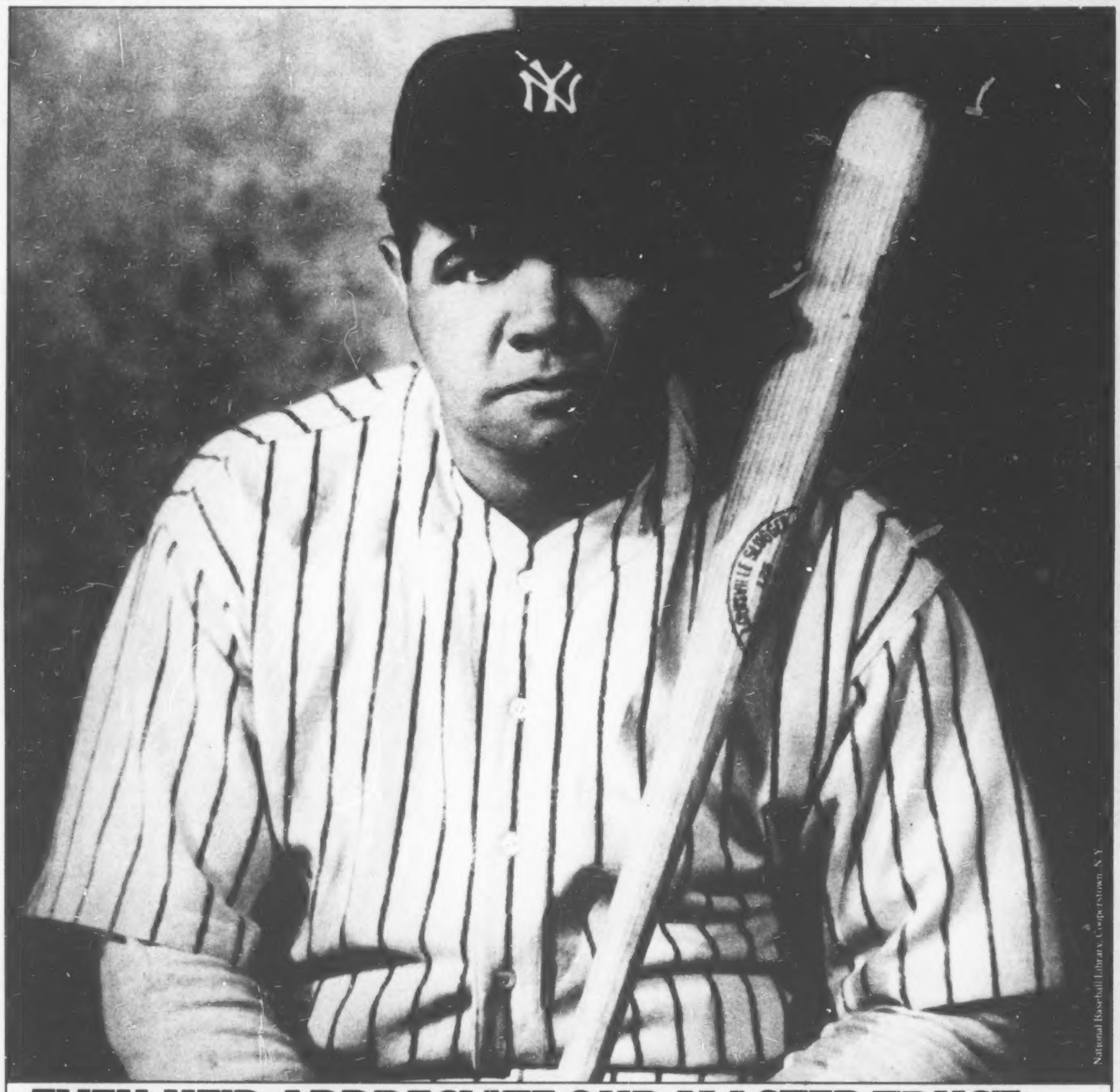
The directory of treasury microcomputer products and services will run March 4.

Tennessee Consolidated Retirement System

	($ millions)
Total assets	3,400
Pension	3,400
Profit-sharing	0
Thrift or savings	0
Employer contributions	160
Benefit payments	130

NASHVILLE, Tenn. — H. Swift Lipscomb Jr., the first chief investment officer of the Tennessee Consolidated Retirement System, retired in April after 20 years with the system.

Pension assets for the Tennessee pension fund increased 14.6% dur-


NY
National Baseball Library, Cooperstown, N.Y.

EVEN HE'D APPRECIATE OUR MASTER TRUST PERFORMANCE.

To be a successful Master Trustee you can't just show up to play.

You must perform well every day.

At State Street, we're committed to top performance. Prompt, accurate accounting, a low error rate, and responsiveness – these are just some of the reasons we are leaders in our field.

And with State Street, accurate information is only the beginning. Our product innovations and technological advances help you operate more effectively.

Ask about our Securities Lending Program. Or our Global Custody Service. Or our on-line computer access capability using IBM PCs.

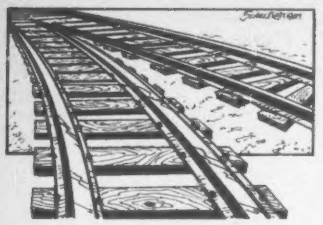
Leadership like ours isn't achieved overnight. Our success is a tribute to the hard work, in-depth experience and superior quality of the professionals on the State Street team.

Hall of Fame performance in anything requires one thing – a commitment to excellence. Join the team. Call Mike Herlihy at (617) 786-6353 today.

State Street Bank and Trust Company. Quality since 1792.

State Street.

State Street Bank and Trust Company, wholly-owned subsidiary of State Street Boston Corporation, 225 Franklin Street, Boston, MA 02101. Offices in Boston, New York, London, Munich, Hong Kong, Singapore. Member FDIC. © Copyright State Street Boston Corporation 1984.



ing the year ended Sept. 30, climbing to $3.4 billion from $2.9 billion.

All of the fund's assets are managed internally. The asset mix as of Sept. 30 was 29% stocks, 56% bonds and 15% short-term investments.

During the year ended Sept. 30, the Tennessee system decreased its commitment in fixed income from 62% last year.

It more than doubled its short-term investments, which were 7% of assets last year.

Tennessee has $35 million invested in international equities, and uses stock and bond options.

Chase Manhattan Bank is the system's custodian.

Dewey Collins Jr. is chief investment officer; Rodney Barber is portfolio manager for the fund.

Tennessee Valley Authority

	($ millions)
Total assets	1,449
Pension	1,390
Profit-sharing	0
Thrift or savings	59
Employer contributions	70
Benefit payments	62

KNOXVILLE, Tenn. — The Tennessee Valley Authority added Aetna Capital Management as an equity manager during 1984.

Pension assets grew 13.6%, contributions grew 1.5% and benefit payments rose 14.8%

The fund has $180 million in index funds, $33 million in dedicated or immunized bond portfolios and $147 million in GICs. Also, $10 million is in oil and gas and $18 million in equity real estate.

The approximate asset mix is 31.3% stocks, 46% bonds, 10.6% cash equivalents, 1.3% real estate equity, 1.4% mortgage-backed securities, 7.9% GICs and 1.5% convertible securities.

Equity managers: Citibank; Aetna Capital; American National Bank.

Bond managers: Citibank; American National Bank; Bank of New York; Commerce Union Bank; First American National Bank (Nashville); First American National Bank of Knoxville; Third National Bank of Nashville.

Real estate managers: Citibank; U.S. Trust.

Eugene Stephens, executive secretary, oversees investment management of the fund.

Texaco Inc.

	($ millions)
Total assets	2,086*
Pension	1,408
Profit-sharing	0
Thrift or savings	678
Employer contributions	70
Benefit payments	na

*P&I Age estimate

WHITE PLAINS, N.Y.— Texaco Inc. reportedly terminated a search for international managers in midyear.

Pensions & Investment Age estimated Texaco's employee benefit assets increased by about 12% in the year ended Sept. 30, 1984.

Managers (according to the 1985 Money Market Directory): Aetna; Alliance; Analytic Investment; Criterion; Equitable; Harris Associates; INVESCO; John Hancock; Manufacturers Hanover Investment; McCowen Associates; Metropolitan Life; New York Life; Tower Capital; Travelers; Trinity Investment Management.

Chase Manhattan Bank is the master trustee.

The fund is overseen by E.W. Wolahan, treasurer; J. David Keough, senior assistant treasurer; and Gordon L. Mills, manager-benefit plans.

Texas County & District Retirement Systems

	($ millions)
Total assets	803*
Pension	803
Profit-sharing	0
Thrift or savings	0
Employer contributions	55
Benefit payments	24

*as of Dec. 31, 1983

AUSTIN, Texas — Assets of the Texas County & District Retirement Systems were $803 million (book value) as of Dec. 31, 1983.

All of the assets are invested internally with the help of Ronald C. Schultz Investments.

The asset mix as of Sept. 30, was 87% bonds, 5% cash equivalents and 8% mortgages.

Key personnel for the fund include J. Robert Brown, executive director, and Terry Horton, comptroller.

Employees Retirement System of Texas

	($ millions)
Total assets	2,459*
Pension	2,459
Profit-sharing	0
Thrift or savings	0
Employer contributions	151
Benefit payments	102

*as of Aug. 31, 1984

AUSTIN, Texas — Assets of the Employees Retirement System of Texas increased to $2.5 billion as of Aug 31, 1984, an increase of approximately 4.6% from 1983. All the assets are managed internally.

INVESCO Capital Management Inc. serves as equity adviser to the pension fund, and Duff & Phelps Investment Management Co. serves as a fixed-income adviser.

The approximate asset mix of the fund is 21% stocks, 65% bonds, 6% cash and 8% mortgage-backed securities.

Key personnel overseeing the fund are Clayton T. Garrison, executive director, and Nancy G. Goerdel, investment director.

Texas Instruments

	($ millions)
Total assets	850
Pension	550
Profit-sharing	300
Thrift or savings	0
Employer contributions	50
Benefit payments	10

DALLAS — Total employee benefit plan assets at Texas Instruments Inc. were $850 million as of Sept. 30, unchanged from 1983.

TI's pension fund dropped bond manager Hoisington Investment Management Co. and hired Westwood Management Corp. for equities.

The asset mix as of Sept. 30 was 45% stocks, 20% bonds, 20% cash, 5% real estate and 10% in private partnerships.

TI has $10 million in a dedicated bond portfolio and $7 million in venture capital.

Equity managers: Miller, Anderson & Sherrerd; Forstmann-Leff; Herbert R. Smith; Leiber & Co.; Rogers Casey & Barksdale; RepublicBank; McKenzie Walker; Westwood.

Bond manager: Citibank.

Others: Smith Vasiliou; Crossroads Capital; Alan Patricoff.

RepublicBank Dallas is master trustee.

William Green is manager-employee benefit fund investment.

Texas Municipal Retirement System

	($ millions)
Total assets	900
Pension	900
Profit-sharing	0
Thrift or savings	0
Employer contributions	70
Benefit payments	28

AUSTIN, Texas — The Texas Municipal Retirement System increased its assets 23% for the year ended Sept. 30, to $900 million from $730 million.

All of the fund's assets are managed internally; Duff & Phelps Inc., Chicago, acts as investment adviser.

Master custodian for the plan is First City Bank, Austin.

The asset allocation as of Sept. 30 was 1% stocks, 98% bonds and 1% cash equivalents.

Overseeing the fund are Jimmie L. Morman, director, and Preston G. Craig, investment officer.

Texas Teacher Retirement System

	($ millions)
Total assets	9,753
Pension	9,753
Profit-sharing	0
Thrift or savings	0
Employer contributions	492
Benefit payments	512

AUSTIN, Texas — Total assets of the Teacher Retirement System of Texas increased more than 13% for the year ended Sept. 30, to $9.8 billion.

The system continued to stress its involvement in direct participation real estate deals; it has committed about $905 million to direct participating real estate and had taken down about $267 million of that by Sept. 30.

All of the system's assets are managed internally.

The asset mix as of Sept. 30 was 31% stocks; 39% bonds, 5% cash, 22% mortgage-backed securities and 3% mortgages.

Bruce Hineman is executive secretary of the fund; Clark Manning is investment officer.

Textron Inc.

	($ millions)
Total assets	1,147
Pension	863
Profit-sharing	54
Thrift or savings	230
Employer contributions	56
Benefit payments	55

PROVIDENCE, R.I. — Employee benefit assets at Textron grew 3% to $1.15 billion during the year ended Sept. 30, 1984.

Balanced managers: Continental Illinois; Harris Trust; Hospital Trust Investors.

Almost 71% of the $863 million in pension assets are managed in-house. Those assets are invested in equity, $153 million; fixed income, $190 million; short-term, $80 million; and $189 million in private placements and mortgages.

Contributions to the fund dropped to $56 million in 1984 from 1983's $68 million. Benefit payments held steady at $55 million.

The fund has $20 million invested in oil and gas holdings.

The approximate asset mix of the pension assets as of Sept. 30 was stocks, 25%; bonds, 31%; cash equivalents, 13%; real estate equity, 1%; mortgages, 16%; and private placements, 14%.

There is no master trustee.

Richard A. Watson, vice president-investment, oversees the investment management of the fund.

Trans World Airlines

	($ millions)
Total assets	1,857
Pension	1,801
Profit-sharing	0
Thrift or savings	56
Employer contributions	102
Benefit payments	168

NEW YORK — Trans World Airlines appointed two managers to run portions of its trust annuity plan for pilots last July.

Mellon Capital Management and Leland O'Brien Rubinstein Associates each received redistributions from balanced accounts managed by Morgan Guaranty Trust, Putnam Advisory and State Street Research & Management.

Leland O'Brien is operating a hedging program to protect returns on equity assets, while Mellon is running an equity index fund.

Total assets of the fund grew approximately 2% in the year ended Sept. 30, to $1.9 billion.

The pension assets grew by just $1 million to $1.8 billion. The company made contributions to all funds of $102 million, and benefits of $168 million were made.

Equity managers: American National Bank; Equitable; Estabrook; Fort Hill; McGlinn Investment; J.P. Morgan; Phelan Capital; Putnam Advisory; Scudder, Stevens; State Street Research; Torray Clark; Vaughan Nelson; Wells Fargo.

Bond managers: Fort Hill; McGlinn; J.P. Morgan; Phelan; Scudder, Stevens.

Real estate managers: Aetna; Citibank; Coldwell Banker.

GICs: Aetna; Equitable; Mercer-Meidinger; New England Life.

Index futures managers: Leland, O'Brien.

The approximate asset mix was 53% in stocks, 6.8% in bonds, 13.7% in cash equivalents, 1.3% in real estate equity, 11.4% in GICs and 13.8% in general insurance.

Key personnel are R.A. Peiser, senior vice president and treasurer; J.F. O'Neil, assistant treasurer; and G.D. Dilley, manager of pension fund investments.

Travelers Corp.

	($ millions)
Total assets	1,110
Pension	838
Profit-sharing	0
Thrift or savings	272
Employer contributions	70
Benefit payments	32

HARTFORD, Conn. — Travelers Corp.'s employee benefit assets increased nearly 12% in 1984, to $1.1 billion from the $993 million reported Sept. 30, 1983.

Of this amount, $838 million was in pension assets and $272 million was in thrift or savings plans.

Contributions and benefit payouts also increased, to $70 million and $32 million, respectively, from 1983's $65 million and $28 million.

All of the pension assets are managed internally by Travelers Investment Management Co.

The fund's asset allocation as of Sept. 30 was 32% stocks, 47% bonds, 6% cash, 7% real estate equity, 3% mortgages and 5% international equities.

Travelers has $150 million in GICs. Of its $50 million invested internationally, $40 million is in eq-

WINNING ON WALL STREET

Increase your profits with Winning on Wall Street.

The leading software system for securities investors and traders.

- For Apple and IBM.
- **Trader's Data Manager™**, the investor's data base. Communications and charting.
- **Trader's Forecaster™**, the technical analysis tool kit. Charting, trending, forecasting and strategy analysis.
- **Trader's Accountant™**, the portfolio accounting system. Reports and simulations.
- **Winning on Wall Street—The Complete System.** Integrates all three into one.

Call or write today.

Free information.

$15 Demo Disk (IBM only).

1-800-792-2211

8-5, Pacific time, M-F.
(Inside Oregon,
503-644-3212)

SUMMA Software

P.0. Box 2046 • Beaverton, OR • 97075

Summa Software™, Winning on Wall Street™, Trader's Data Manager™, Trader's Forecaster™, Trader's Accountant™ are trademarks of Summa Software Corporation. Copyright © 1984, Summa Software Corporation. All rights reserved.

WELLS FARGO & COMPANY

is pleased to announce

Wells Fargo Investment Advisors

the leading investment manager of indexed portfolios

has become

a wholly-owned subsidiary of Wells Fargo & Company

Frederick L. A. Grauer, President
Wells Fargo Investment Advisors
475 Sansome Street
San Francisco, CA 94111
(415) 396-2906

uity and $10 million in fixed income. The insurer has $58 million invested in real estate equity and $25 million in mortgages. Its master trustee is Connecticut National Bank.

In May, C. Roderick O'Neil left as chief investment officer and chairman of the investment committee to join Alan Greenspan in launching a new money management firm, Greenspan O'Neil Inc.

Key personnel include Harvey Saffeir, senior vice president of Travelers Insurance; Kevin Bradley, chairman of TIMCO; and Girish Reddy, vice president at TIMCO.

TRW Inc.

	($ millions)
Total assets	1,336
Pension	1,230
Profit-sharing	0
Thrift or savings	106
Employer contributions	100
Benefit payments	87

CLEVELAND — TRW Inc.'s internally managed pension portfolio increased 30.5% — $68.3 million — during the year ended Sept. 30. At the same time, total employee benefit assets rose to $1.3 billion from $1.2 billion — or 7.8%.

The company manages $292 million internally through TRW Investment Management. Of that, $253 million was invested in equities, $11 million in bonds and $28 million in cash as of Sept. 30.

Equity managers: Endowment Management & Research; Fred Alger; Campbell Advisory; L.F. Rothschild; Alliance.

Bond managers: Pacific Investment; Hoisington; MacKay-Shields.

International managers: Ivory & Sime; Baring.

Venture capital manager: Weiss, Peck & Greer.

The approximate asset mix of TRW's pension assets was 65.4% stocks, 18.7% bonds and 15.9% cash equivalents.

Boston Safe Deposit & Trust is its master trustee.

Edward Button, president of TRW Investment, Robert Hamje, vice president, and John Jostrand, analyst, oversee investments for the fund.

u

Union Carbide Corp.

	($ millions)
Total assets	2,500
Pension	2,500
Profit-sharing	0
Thrift or savings	0
Employer contributions	na
Benefit payments	147

DANBURY, Conn. — The total assets of Union Carbide Corp.'s pension fund have increased 4%, to $2.5 billion, as of Sept. 30, 1984, from $2.4 billion the previous year.

The company estimated benefit payouts in 1984 would total $147 million.

Stock and bond index options and stock and bond index futures are used by the pension fund.

All assets are managed internally with 17% in stocks, 64% fixed income (bonds and mortgages), 17% in cash equivalents, and 2% in real estate equities.

Manufacturers Hanover Trust Co. is master trustee for the fund.

James A. O'Connell, assistant treasurer and director, oversees the pension fund.

United Air Lines Inc.

	($ millions)
Total assets	3,500
Pension	3,500
Profit-sharing	0
Thrift or savings	0
Employer contributions	na
Benefit payments	na

CHICAGO — In 1984, the United Air Lines fund committed $20 million to Nikko International Capital Management to invest in Japanese equities.

Also, Robert Gillette, formerly with Emerson Electric Co., joined the United Air Lines fund as pension assets administrator.

Assets for the fund increased 1.04% to $3.5 billion as of Sept. 30.

Equity managers: CIGNA; Jennison; Pioneeing; Fayez Sarofim; Sit; Stralem; Trust Co. of the West; Batterymarch; Lincoln; Thorndike; Trinity; Wells Fargo.

Bond managers: Morgan Grenfell; Discount Corp.; Harris.

Real estate managers: La Salle Partners; RREEF; Pacific Mutual.

International managers: G.T. Capital; Capital Guardian; Baring; Morgan Grenfell; Nikko; Yamaichi.

Master trustee is Harris Bank.

Key personnel include Mr. Gillette and John Batten, vice president and treasurer.

United Methodist Pension Fund

	($ millions)
Total assets	1,578
Pension	1,578
Profit-sharing	0
Thrift or savings	0
Employer contributions	160
Benefit payments	115

EVANSTON, Ill. — The United Methodist Pension Fund hired three bond managers and one equity manager in 1984.

The new bond managers are Lincoln Capital Management, STW Fixed Income Management and Criterion Investment Management. The equity manager is John McStay Associates.

The fund's assets rose about 4%, to just less than $1.6 billion from $1.5 billion for the 12 months ended Sept. 30, 1984.

A total of $260 million, all in fixed income, is managed in-house.

The fund has $205 million indexed, $28 million in dedicated or immunized bond funds and $240 million in GICs. A total of $33 million is in real estate equity and $2 million is in mortgages.

Equity managers: American National Bank; Capital Guardian; Century Capital; Chase Investment; Cole, Yeager; Delaware Investment Advisors; Frontier Capital; David J. Greene; INVESCO; Putnam; M.D. Sass; John McStay.

Bond managers: CIGNA; Stein Roe; Lincoln; Criterion; STW.

Real estate managers: CIGNA; JMB.

The asset mix as of Sept. 30 was 54.5% equities, 25% bonds, 18% cash equivalents, 15.2% GICs, 2.4% real estate equity and 0.1% mortgages.

Gerald K. Hornung is general secretary of the fund, James F. Parker is treasurer and Gale Whitson-Schmidt is assistant treasurer.

A special report on 401(k) plans will be published in the April 15 edition.

United Mine Workers of America Health & Retirement Funds

	($ millions)
Total assets	2,784
Pension	2,784
Profit-sharing	0
Thrift or savings	0
Employer contributions	528
Benefit payments	397

WASHINGTON — The United Mine Workers of America Health & Retirement Funds juggled the fixed-income manager lineup in 1984. Hired to run bond accounts for the $2.78 billion in pension assets were T. Rowe Price Associates; Loomis, Sayles & Co.; STW Fixed Income; and Morgan Guaranty.

In addition, CM&M Asset Management was selected to run a bond account formerly managed by Fidelity Bank; Lacy Hunt, Fidelity's former chief economist, set up the CM&M unit.

Three reasons to consider Hutton Capital Management.

1

Disciplined and understandable approach to asset allocation and portfolio structure.

2

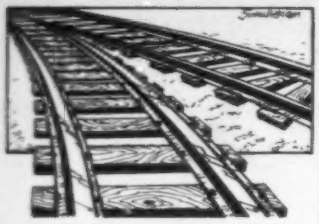
Value-oriented, fundamental equity selection process.

3

Results have been consistently superior in both up and down markets.

For the details, call or write:

Peter S. Hagerman, Director
Hutton Capital Management
17 Battery Place
New York, New York 10004
(212) 742-6557



The fund also dropped Manufacturers Hanover and Hoisington Investment Management as bond managers. The fund hired Tower Capital to run an equity account in late 1983.

On the real estate side, the fund committed to Goldman, Sachs' new open-end fund and to The RREEF Funds. John Hancock Mutual Life was dropped.

Equity managers: Argus; Batterymarch; Denver Investment Advisors; F.I.A.; Pioneering Management; Thompson, Siegel & Walmsley; Tower; Torray & Clark; Warburg, Pincus.

Bond managers: Argus; CM&M; Criterion; Degnan & Gillespie; Lehman; Loomis, Sayles; Morgan Guaranty; T. Rowe Price; STW.

Real estate managers: Equitable; Goldman, Sachs; Metropolitan; Prudential; RREEF; State Street Research; TCW Realty.

Cash manager: Bankers Trust.

The fund uses fixed-income futures.

As of Sept. 30, pension assets had grown 10.3% from a year earlier, rising to $2.78 billion from $2.52 billion.

The asset mix was 36% stocks, 41% bonds, 15% cash equivalents, 5% real estate equity and 3% mortgage-backed securities.

Boston Safe Deposit & Trust Co. is the custodian.

Herbert L. Dyer, executive director, and Linda R. Taylor, chief investment officer, oversee investments.

April 15: A 401(k) special report.

United Nations Joint Staff Pension Fund

	($ millions)
Total assets	3,610
Pension	3,610
Profit-sharing	0
Thrift or savings	0
Employer contributions	380
Benefit payments	320

NEW YORK — The United Nations Joint Staff Pension Fund increased 6% to $3.6 billion, as of Sept. 30, 1984, from $3.4 billion a year earlier.

It is estimated employer contributions to the fund will total $380 million for 1984, and benefits paid out to retirees, $320 million.

The fund is managed in-house, with the advice of Fiduciary Trust Co. of New York.

Roughly 34% of total assets, or $1.3 billion, is invested internationally. Of that, 51% or $663 million, is in foreign equities, 47% or $611 million is in overseas fixed income, and 2% or $24 million is in other types of securities.

The fund holds $367 million, 10.5% of total assets, in real estate equities in the United States, Europe and Australia.

The pension asset mix is: 54% stocks, 34% bonds, 1.5% cash equivalents, 10.5% real estate equity.

Key investment personnel are: Timothy P. Prince, chief of the investment section; E. Charles Stockmar, senior investment officer; Henry Ouma, investment officer; and Sigrid Focke, investment officer.

United Presbyterian Church Pension Board (USA)

	($ millions)
Total assets	965
Pension	926
Profit-sharing	0
Thrift or savings	39
Employer contributions	48
Benefit payments	44

PHILADELPHIA — Pension assets at the United Presbyterian Church Pension Board increased almost 4% during the year ended Sept. 30, to $962 million from $892 million.

The church has $964.6 million in employee benefit assets, including $38.4 million reserved for retirement residences, benefits supplements and endowments.

During the year, the Presbyterian Church Pension Board hired CIGNA for a $25 million real estate commitment. It also gave Templeton Investment Counsel a global investment account, with the objective of having the manager outperform the Templeton World Fund, a manager since 1980.

Equity managers: Fred Alger; Froley, Revy; J.P. Morgan; Wells Fargo Investment Advisors.

Bond managers: Robert C. Brown; CM&M Asset; J.P. Morgan.

GICs: Aetna; John Hancock; Travelers.

Real estate manager: CIGNA.

Global manager: Templeton.

The fund has $12.5 million invested internally: $7.5 million in fixed income and $5 million in short-term instruments.

About $160 million of the fund is indexed, almost $218 million is in GICs and $7.5 million is in dedicated or immunized bond portfolios.

More than $32 million is invested in international equities and a modest $250,000 is committed to venture capital. The fund also uses stock index futures.

The fund's approximate asset mix as of Sept. 30 was 51.8% stocks, 12.3% bonds, 10.9% cash equivalents, 2% equity real estate and 23% GICs.

Wm. Irwin Arbuckle, II, vice president-finance and treasurer, oversees investments.

United Technologies Corp.

	($ millions)
Total assets	4,631*
Pension	3,735
Profit-sharing	0
Thrift or savings	896
Employer contributions	195
Benefit payments	112

*P&I Age estimate

HARTFORD, Conn. — During 1984, United Technologies Corp. sought approval from the Department of Labor to place its headquarters as a $52 million contribution to the pension fund.

The fund restructured its management team, splitting the administrative and investment functions. Also, Beverly Lannquist was assigned to the newly created position of vice president in charge of pension investments. Earlier in the year, Charles Lard, assistant treasurer-pension investments, left to form an alternative investment management firm.

Equity managers: NSR Asset; Jennison; BEA; Citibank; CIGNA; Delaware Investment; Forstmann-Leff; Lehman.

Real estate managers: Eastdil; Landauer; CIGNA.

International managers: Batterymarch; ABD; Nomura.

All managers are according to the Money Market Directory.

The fund had $221 million invested overseas, $205 million in equities and $16 million in fixed income. The fund also has $164 million in real estate equity.

It had $59 million in dedicated or immunized bond funds and $25 million in GICs.

The approximate asset mix of the pension assets as of Dec. 31, 1983, was stocks, 40.4%; bonds, 3.4%; cash equivalents, 8.5%; real estate equity, 4.8%; mortgages, 0.4%; GICs, 0.8%; and annuities, 41.7%.

Citibank is the master trustee for the defined benefit plan and Bankers Trust for the saving plan.

Key personnel involved in overseeing the investment management

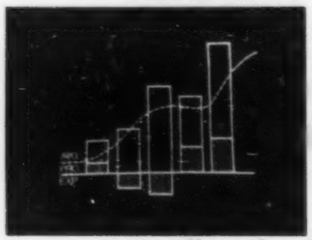
What to look for in a *master* Master Trustee.

THE
TUCS
SYSTEM

Service.

At C&S, that means personalized attention to detail. For every single client. No matter what size. It's one big reason why C&S is one of the largest banks and largest pension managers in the Southeast. And precisely why our Master Trust Department has the most growth potential in the entire region.

Service.



Advanced record keeping and reporting procedures. C&S has the resources and the acumen necessary to assure every client timely accurate information; whenever it's needed.

Service.

C&S features the TUCS® system—the most extensive and flexible manager comparison database available for monitoring investment performance.

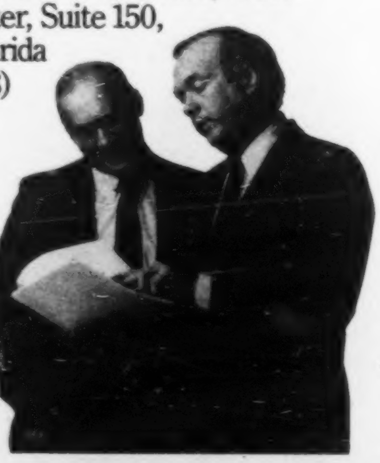
And more service.

C&S people. Certified Employee Benefit Specialists who know their business and the accounts they serve.

Find out for yourself about the C&S Masters of the Master Trust.

Write or call Ed Smith, The Citizens and Southern National Bank, Corporate and Institutional Trust Services, P.O. Box 4114, Atlanta, Georgia 30302. (404) 897-3083.

Or Dan Davis, The Citizens and Southern National Bank, Corporate and Institutional Trust Services, 1715 North Westshore Boulevard, Westshore Center, Suite 150, Tampa, Florida 33607. (813) 873-1088.



C&S

of the funds are Beverly L. Hamilton, vice president-pension investments; and Carl W Strayer, director-pension investments.

Unocal Corp.

	($ millions)
Total assets	1,194
Pension	815
Profit-sharing	379
Thrift or savings	0
Employer contributions	64
Benefit payments	62

LOS ANGELES — Beutel, Goodman Capital Management and Pilgrim, Baxter, Hoyt, Greig are new equity managers and Criterion Investment Management is a new bond manager for the pension fund at Unocal Corp., which also changed its name, from Union Oil Co. of California.

The fund dropped Dreyfus Management in equities, Fidelity Bank in bonds and Equitable Life Assurance in real estate.

Pension assets grew 3.8%, employer contributions dropped 14.7% and payouts to beneficiaries rose 31.9%.

The approximate asset mix as of Sept. 30 was 42% stocks, 8% bonds, 15% cash equivalents, 5% real estate equity, 1% mortgage-backed securities, 25% immediate participation guarantee insurance contracts and 4% accrual of contributions. Unocal has $35 million in overseas equity markets, $7 million in venture capital and $40 million in equity real estate.

Equity managers: Beutel, Goodman; Delaware Investment; Hellman, Jordan; IDS Advisory; Lincoln Capital; Pilgrim Baxter; Siebel Capital; Stralem.

Bond managers: Criterion; Hoisington.

Real estate managers: Aetna; First Chicago Investment; Prudential Asset Management.

International managers: Kleinwort Benson; Martin Currie.

Northern Trust is the master trustee.

George Hanks, assistant comptroller, oversees fund investment.

U.S. Steel and Carnegie Pension Fund

	($ millions)
Total assets	6,850
Pension	6,850
Profit-sharing	0
Thrift or savings	0
Employer contributions	202
Benefit payments	795

NEW YORK — The U.S. Steel and Carnegie Pension fund's assets declined by almost $500 million in the year ended Sept. 30, as benefit payments continued to far exceed contributions.

The fund paid out $795 million to beneficiaries while contributions totaled $202 million. The excess of benefit payments to contributions arises because layoffs in the steel industry have increased the number of retirees collecting benefits while reducing the company's annual contribution, which is tied to employment levels.

All of the fund's assets are managed internally.

The company declined to give an asset mix, but sources put the equity assets at about $4.3 billion and real estate assets at about $245 million, of which about $155 million is in real estate equity, $35 million in Ginnie Maes, $45 million in real estate property trusts and $10 million in residential mortgages.

In addition, the fund is believed to have at least $200 million in international investments.

Graham O. Harrison, president, and John Van Deusen, vice president, oversee the fund.

U S WEST

	($ millions)
Total assets	2,944
Pension	2,494
Profit-sharing	0
Thrift or savings	450
Employer contributions	193
Benefit payments	229

ENGLEWOOD, Colo. — U S WEST inherited $2.3 billion in employee benefit assets from AT&T early in 1984 following divestiture from the parent company and expects to receive an additional $1.7 billion in 1985.

Total assets on Sept. 30, 1984, were $2.9 billion.

The fund has approximately $150 million invested in venture capital and about $457 million in indexed funds.

Equity managers: Capital Guardian; Dean Witter Intercapital; Clarens Associates; David J. Greene; First Asset Management; United Capital Management; Wells Fargo; First Manhattan Co.

Bond managers: Jennison; Capital Guardian; Fayez Sarofim.

Venture capital: Citibank; Denver Investment; First Asset Management.

Real estate: Jones Lang Wootton; TCW Realty; LaSalle Fund II.

On Sept. 30, the asset mix was 31% bonds, 55% stocks, 13% cash and 1% mortgages.

Boston Safe Deposit & Trust Co. is master trustee.

James Biundo is director-trust investment management.

Utah State Retirement Fund

	($ millions)
Total assets	1,783
Pension	1,783
Profit-sharing	0
Thrift or savings	0
Employer contributions	76
Benefit payments	42

SALT LAKE CITY — The Utah State Retirement Fund increased its assets 7.7% during the year ended Sept. 30, growing to about $1.8 billion.

During the year, cities and counties that had withdrawn from the fund in 1982 returned to the fold after compromises were enacted by the Utah Legislature. However, some of the participants said they intend to continue attempts to withdraw and set up their own retirement plans.

About 63% — or $1.1 billion — of the fund's assets are managed internally. Of that, $201 million is in equity, $750 is in fixed income, $118 million is in short-term investments and $57 million is in other investments.

The Utah fund has $135 million in an index fund. It also uses options.

Equity managers: Atalanta/Sosnoff; Capital Consultants; Smoot Knoche; Value Line; Wasatch Advisors.

Real estate managers: F.I.A. Associates.

The Utah State Retirement Fund's asset mix as of Sept. 30 was 34% stocks, 42% bonds, 12% cash equivalents, 7% real estate equity, 1% mortgages and 4% mortgage-backed securities.

Chemical Bank is custodian.

W. Dan Smith is investment officer; Richard Cherry is assistant investment officer.

V

Virginia Supplemental Retirement System

	($ millions)
Total assets	3,595
Pension	3,595
Profit-sharing	0
Thrift or savings	0
Employer contributions	348
Benefit payments	228

RICHMOND, Va. — The Virginia Supplemental Retirement System went through three chief investment officers in 1984.

Jonathan P. White resigned

"He must have hired Loomis, Sayles."

Success is something everyone recognizes. And everyone wants. For the past 58 years we've been creating success for our clients. And today, they are joining us in record numbers.

We are managing large funds with the same proficiency investors associate with smaller funds.

Which takes many people by surprise. But really shouldn't.

When it comes to investing, success speaks for itself.

We are Loomis, Sayles and Company.
For more information call
Charles C. Thomas (617) 482-2450

LOOMIS, SAYLES & COMPANY
INCORPORATED
INVESTMENT COUNSEL SINCE 1926
BOSTON • CHICAGO • DETROIT • LOS ANGELES • MEMPHIS • MILWAUKEE
NEW YORK • PHILADELPHIA • SAN FRANCISCO • WASHINGTON, D.C.

abruptly in January; Robert Daniels, who then became acting director of investments, left several months later because of illness. Robert F. Vandell, a University of Virginia business professor who came on board during summer, returned to his full-time professorial duties this month, though he will continue as a consultant to the fund.

Timothy R. Barron, the assistant director who joined the fund from the Richmond Supplemental Retirement System earlier in the year, is expected to be named chief investment officer.

In addition, the fund invested nearly $143 million in an equity index fund run by Mellon Capital Management.

Equity managers: Batterymarch; Delaware Investment Advisers; IDS Advisory; Lincoln Capital; MPT Associates; MacKay-Shields; Putnam; Mellon Capital; Wells Fargo Investment Advisors.

Bond manager: Massachusetts Financial Services.

Real estate managers: Equitable Life; LaSalle; Prudential; and RREEF.

Assets increased to $3.595 billion as of Sept. 30, up 9.8% from the year before. Contributions and benefit payments were estimates for the year ended June 30, 1985.

The asset mix was 54.9% stocks, 26.8% bonds, 6% cash equivalents, 6.2% real estate equity, 6% mortgage-backed securities and 0.1% in state buildings.

Sovran Bank is the custodian.

W

Washington State Investment Board

	($ millions)
Total assets	5,400
Pension	5,4000
Profit-sharing	0
Thrift or savings	0
Employer contributions	500
Benefit payments	na

OLYMPIA, Wash. — The Washington State Investment Board increased its commitment to venture capital in 1984, making $91 million in commitments to six venture capital partnerships. The investment brings its total commitment to venture capital to $127 million for the board.

In two of the new partnerships, Evergreen I and II, the Washington board is the sole limited partner and it has committed $25 million to each fund. Brentwood Associates is the general partner for one of the Evergreen partnerships and John Hancock Venture Capital Corp. is the general partner for the other.

The board also committed $20 million to Menlo Venture III partnership, $15 million to Brentwood Associates IV, $4 million to Paragon Partners and $2 million to Pierce Nordquist Partners.

Also in 1984, David Weig, formerly chief economist with the state's office of financial management, replaced David Lodefink as deputy director of the board. Mr. Lodefink opened his own investment counseling firm.

Pension assets for the board increased 8% during the 12-month period ending Sept. 30, increasing to $5.4 billion from $5 billion a year earlier.

Equity managers: Hotchkis & Wiley; Batterymarch; Columbia Management; Schafer Capital; Torray Clark; United Capital Management.

Real estate managers: Equitable; Prudential; Smith Barney; Pacific Mutual; RREEF; Copley.

Bonds are managed in-house.

As of Sept. 30, the board had $2.349 billion in stocks, $2.157 billion in bonds, $477 million in real estate equities, $127 million committed to venture capital and $176 million in leveraged buy-outs.

The asset mix was 50% stocks, 35.9% bonds, 10% cash equivalents, 2.8% leveraged buy-outs and venture capital and 1.3% real estate.

The state treasurer's office serves as custodian.

John Hitchman is executive director.

Westinghouse Electric Corp.

	($ millions)
Total assets	3,650
Pension	3,100
Profit-sharing	0
Thrift or savings	550
Employer contributions	145
Benefit payments	300

PITTSBURGH — Total employee benefit assets at Westinghouse Electric Corp. increased about 4.3% to $3.65 billion, as of Sept. 30, from $3.5 billion the previous year. Of the total, $3.1 billion are pension assets and $550 million are thrift or savings assets.

The employer contribution will be $145 million this year, which is a 7% decline from the $156.5 million of a year earlier. The benefits paid out to retirees should come to $300 million this year, which is a 36% increase from 1983's $220 million.

Westinghouse manages roughly 63%, or $2,295 million, internally through its investment management subsidiary, Westinghouse Pension Investments. The in-house asset mix stands at: 20% or $470 million in equities; 22% or $495 million in short-term investments; and 58% or $1.33 billion in fixed income.

The pension fund uses both stock and bond options and stock and bond index futures as hedging devices.

It holds $350 million in GICs. Roughly $20 million is committed to venture capital investments.

Equity managers: Provident Capital; Stralem; Manufacturers Hanover Investment Corp.; Pittsburgh National Bank.

Real estate managers: Equitable; Citibank; Mellon; FNB Chicago.

The approximate asset mix was 24% stocks, 39% bonds, 13% cash equivalents, 12% real estate equity, 2% mortgages and 10% GICs.

Mellon Bank is master trustee.

Key investment personnel are: R.V. Billings, vice president of investments; T.A. Gudiness, director pension funds; and B.N. Dorsett, president of Westinghouse Pension Investments.

West Virginia Board of Investments

	($ millions)
Total assets	1,265
Pension	1,265
Profit-sharing	0
Thrift or savings	0
Employer contributions	92
Benefit payments	122

CHARLESTON, W. Va. — The West Virginia Board of Investments hired Pittsburgh National Bank's risk control group to run $280 million in the teachers', judges' and public safety employees' retirement systems.

Loomis, Sayles retained management of the $580 million public employee fund, but lost control of $585 million from the workmen's compensation fund to Scudder, Stevens & Clark.

In addition, the board invested $50 million in collateralized mortgage obligations based on mortgages bought from in-state thrift institutions.

Bond managers: Loomis, Sayles; Pittsburgh National.

The fund uses fixed-income futures.

Of the $1.27 billion in pension assets the board oversees, $415 million was managed internally. The fund does not invest in equities.

As of Sept. 30, the asset mix was 75% bonds, 9% cash equivalents, 9% mortgages and 7% mortgage-backed securities.

Kathryn M. Lester is director of investments; Phyllis White, Mary Hudson and Diana Will are investment officers.

Wisconsin State Board of Investment

	($ millions)
Total assets	8,692
Pension	8,692
Profit-sharing	0
Thrift or savings	0
Employer contributions	500
Benefit payments	300

MADISON, Wis. — The Wisconsin State Board of Investment moved into real estate equity for the first time during the summer.

It also purchased at least 5% of six companies near the end of the first half of 1984 in an attempt to improve its performance results and to look at some new companies.

The investment board increased its assets by about 10% in the year ended Sept. 30, to $8.7 billion from $7.9 billion.

All of the assets are managed in-house with $3.9 billion in equities, $4.1 billion in fixed income, $542 million in short-term investments, and $184 million in real estate.

The fund's asset mix was 45% stocks, 41.9% bonds, 6% cash equivalents, 0.1% real estate equity, 2% mortgages and 5% mortgage-backed securities.

Morgan Guaranty is master trustee.

Kenneth Codlin is executive director.

World Bank

	($ millions)
Total assets	1,189
Pension	1,189
Profit-sharing	0
Thrift or savings	0
Employer contributions	72
Benefit payments	na

WASHINGTON — The World Bank Staff Retirement Plan, bucking the trend, cut its indexed equity investments by more than half in 1984. As of Sept. 30, indexed assets dropped to $255 million from $545 million a year earlier.

The fund also invested in venture capital partnerships run by Warburg, Pincus Capitol Partners and Mayfield Fund V, according to reports. The fund had $26 million invested in venture capital as of Sept. 30, World Bank officials said.

The $1.19 billion pension fund also committed assets to Property Capital Trust, a real estate investment trust.

The bank declined to reveal the names of its managers. However, sources say they include:

Equity managers: Grantham, Mayo, Van Otterloo; Meridian Management; Quest Advisory; Torray & Clark; State Street Bank; Tower Capital; Wells Fargo Investment Advisors.

Bond managers: AIM Capital; Robert C. Brown; First Investors Asset Management; Fischer, Francis, Trees & Watts; MacKay-Shields.

Real estate manager: State Street Bank.

International managers: Grantham, Mayo; Morgan Guaranty; State Street Bank.

The fund also uses State Street's SPIFF fund, an index fund that uses stocks and futures.

As of Sept. 30, the pension assets increased 13.7% from the year before, growing to $1.19 billion from $1.046 billion.

The asset mix was 72.2% stocks, 24% bonds, 0.2% cash equivalents; and 3.6% real estate equity.

State Street Bank is master trustee.

Key personnel are Hilda Ochoa, chief, pension investment division, and Farida Khambata and George Alvarez-Correa, investment officers.

X

Xerox Corp.

	($ millions)
Total assets	1,611
Pension	145
Profit-sharing	1,210
Thrift or savings	256
Employer contributions	78
Benefit payments	37

STAMFORD, Conn. — Xerox Corp. dropped two managers in 1984 and brought in four.

The company dropped Ivory & Sime as an international manager. It also terminated its junk bond account with Eberstadt Asset Management when the manager was folded into the operations of its new owner, Alliance Capital Management.

The Eberstadt account was turned over to William Huff, a former Eberstadt fixed-income manager who is launching his own firm. Xerox also hired Jennison Associates as a bond manager; Grantham, Mayo, Van Otterloo for international; and Tweedy, Browne for equities in 1984.

Xerox had total employee benefit assets of $1.6 billion as of Sept. 30. That figure does not include $75 million in long-term disability and supplemental unemployment benefit assets.

International investments total $108 million — $99 million in equities and $9 million in fixed-income. In addition, Xerox has $177 million committed to equity real estate and $7 million committed to oil and gas estments. About $251 million is in GICs.

Equity managers: Batterymarch; Trust Co. of the West; Rosenberg Capital; Citibank; First Pacific Advisors; Schafer Capital; Management Asset Corp.; Investors Research; Siebel Capital; Hellman, Jordan; Brokaw Capital; Carter Oak Partners; Tweedy, Browne; Thorndike, Doran.

Bond managers: Jennison Associates; Solomon Asset; Rosenberg Capital; and W.R. Huff.

International managers: Capital Guardian; G.T. Capital; Fidelity International; Grantham, Mayo.

Real estate managers: JMB; RREEF and TCW Realty.

GICs: Equitable; Travelers; Provident National.

The approximate asset mix of the pension and profit sharing plans was 66.1% stocks, 9.6% bonds, 10.6% cash equivalents, 13.2% equity real estate and 0.5% oil and gas.

State Street Bank is master trustee.

Key investment personnel are Robert Evans, director-employee benefit assets; Myra Drucker, manager-trust investments; and Gerald Paolini, manager-trust performance analysis.

The directory of microcomputer products and services available for treasury management will run March 4.

The microcomputer products and services directory for treasury management will run March 4.

Boston Financial Technology Group, Inc.
announces the formation of

Boston Financial Real Estate Advisors
A division providing and managing real estate
investments for the institutional investor.

and that
Peter F. Tague, III

has joined the division as a Senior Vice President

Boston Financial Real Estate Advisors
Suite 1400, One Post Office Square
Boston, MA 02109 (617)-482-9790

Senior Officers:
Duncan A. Christie
James S. Hughes
Peter F. Tague, III

C2710-2

GMAC introduces use of futures

By Richard J. Gillespie

NEW YORK — General Motors Acceptance Corp., one of the largest commercial paper issuers in the world, has introduced new techniques, including the use of futures, for managing its liabilities and interest rate exposures.

With $16 billion in commercial paper outstanding alone, GMAC has found even minute daily fluctuations in short-term rates can add up to millions of dollars, while larger fluctuations can cost more than $100 million in additional interest expense.

One way in which the giant auto and equipment financing corporation is attempting to stabilize its borrowing costs is with financial futures.

Another way it already has moved to cut its borrowing costs is by changing its formula on master note agreements it has outstanding with bank trust departments.

One problem GMAC might find as its liability management project matures is that the size of its borrowings ultimately might hamper its ability to manage its exposures.

Jerome B. Van Orman, director of liability management, is in charge of the pilot program launched last year to hedge GMAC's exposure to volatile short-term markets.

While Mr. Van Orman declined to reveal how much of its commercial paper exposure the company was attempting to hedge, he said there is no size handicap in the program's current form.

Cash management

He also said GMAC would not want to manage the exposure on the entire $16 billion, even if it could, which he said it cannot.

"We are still in the start-up phase of this project. In four years time, maybe we could make the program bigger, but to have contracts outstanding on the full amount would be impossible and a risk in itself," said Mr. Van Orman, who previously was with the treasury group of General Motors Corp.

The three financing instruments most appropriate for hedging are futures, interest rate swaps and interest rate options, he said.

While interest rate swaps have been used with GMAC's longer-term borrowings, the liability management project targeted the futures market for its start-up phase.

"We have viewed futures as more in tune with (our policy of)

Continued on page 38

Late news

Finalists announced

SACRAMENTO, Calif. — Trustees of the $13 billion California State Teachers' Retirement System are meeting with eight equity manager finalists, several of which could be hired Feb. 15 and share in an estimated $1 billion in assets.

Robin Miller, assistant chief executive officer, said the finalists are Barrow, Hanley, Mewhinney & Strauss, Dallas; Cashman, Farrell and Associates, Wayne, Pa.; Delaware Investment Advisors, Philadelphia; First Pacific Advisors Inc., Los Angeles; Provident Capital

Continued on page 2

Pensions & Investment Age

Entire contents copyright 1985 by Crain Communications Inc. All rights reserved.

The newspaper of corporate and institutional investing • $3.50 an issue • $67 a year • February 4, 1985

Phillips sets campaign of persuasion

By Barry B. Burr

The Council of Institutional Investors has scheduled a meeting Feb. 14 in New York with Phillips Petroleum Co. officials and T. Boone Pickens to discuss the company's recapitalization drive.

The effort involves buying back the shares held by a group organized by Mr. Pickens and putting control of the company with an employee stock ownership plan.

The meeting is one of several planned by Phillips in an effort to persuade large shareholders to support the company in its effort.

"We want to convince them of the viability of the recapitalization," said Fred Terry, manager of investor relations for the Bartlesville, Okla., firm.

Jere D. Smith, director of media relations, said Phillips promised to meet with the Council of Institutional Investors, a new group of 25 public and two multiemployer pension funds organized to protect their interests.

Many council members, together having more than $100 billion in assets, hold few, if any, shares of Phillips, compared with other institutional investors.

As of Sept. 30, CDA Investment Technologies Inc., Silver Spring, Md., reported that about 12 pension funds and 300 investment managers owned Phillips stock.

Among the largest holders were Delaware Management Co., 2,280,800 shares; California Public Employees Retirement System, 830,600; Teacher Retirement System of Texas, 1,134,600; Wells Fargo Bank, 1,123,154; Capital Guardian Trust Co., 4,473,900; Fayez Sarofim & Co., 1,387,720; and the College Retirement Equities Fund, 1,228,300.

Continued on page 38

Transfer of excess assets OK'd

By Joel Chernoff

WASHINGTON — Employers can transfer excess assets from a pension plan to another retirement plan, the IRS confirmed in a letter.

But the Internal Revenue Service letter and a resulting promotion by Buck Consultants Inc. have sparked a furor among pension experts, government agencies and an influential congressman.

The letter prompted Buck, its recipient, to tout the method to clients and potential clients as a new way to "utilize surplus pension assets for corporate purposes" — without terminating the plan or meeting other rules spelled out in plan termination guidelines issued by the government last year.

In general, the Jan. 16 letter said an employer can transfer part of the surplus assets in a defined benefit plan to cover the employer matching contribution to its 401(k) feature of a profit-sharing plan.

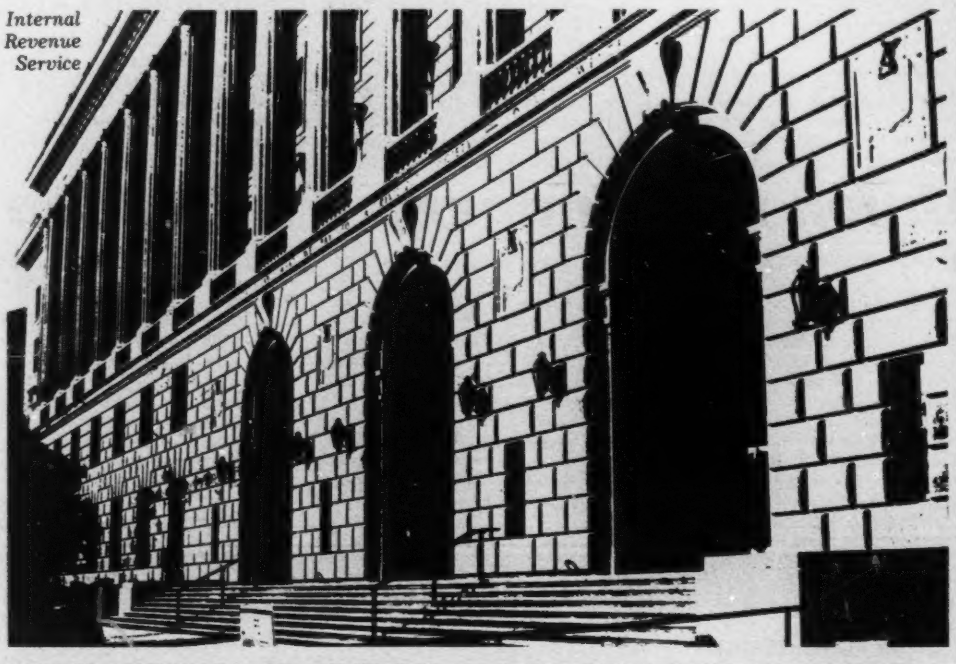
The spun-off assets would not be included in employer income, nor would the contribution be deductible. Moreover, the transferred amount would be treated as a loss for the defined benefit plan, and thus amortized under pension rules.

The transfer would have no effect on net income, but would show up as a liability on the balance sheet, according to Timothy Lucas, project manager for the Financial Accounting Standards Board, Stamford, Conn.

The letter has drawn sharp criticism from Rep. Edward Roybal, D-Calif., chairman of the House Select Committee on Aging, who doubts the method's legality.

The letter also has spurred inquiries from top officials at the Department of Labor and the Pension Benefit Guaranty Corp., who met

Continued on page 39



Internal Revenue Service

Florida policy gets mixed reviews

By Barry B. Burr and Rose Darby

TALLAHASSEE, Fla. — A public fund's insistence on tough negotiation of money management fees has lost it at least one potential manager, while some others have agreed to negotiate lower fees for the privilege of running about $75 million each.

Bessemer Trust Co. of Florida, Palm Beach, lost the chance to run $75 million in growth-oriented equities for the Florida State Board of Administration because it refused in January to give the fund the low fee sought, said Michael F. Page, Bessemer executive vice president.

Meantime, Hutton Capital Management, New York, and the Florida fund still are negotiating fees. At stake for Hutton is running $75 million in value-oriented equities.

Bessemer and Hutton were among 11 equity managers the Florida board had said it selected, pending completion of contract terms (*Pensions & Investment Age*, Oct. 29).

Bargaining focused on fees, according to E.J. Yelton, the fund's executive director, and some of the money managers.

Nine of the 11 agreed to the lower fees, Mr. Yelton said. However, two managers disputed that.

One of the nine, Southeastern Asset Management Inc., Memphis, Tenn., gave the fund "a pretty good discount on our regular rates," said James A. Thomas III, president of Southeastern. As a result, it is running about $50 million of a $75 million commitment in equities.

In 1984, fees caused Lehman Management Co., New York, to pass up a chance to manage $100 million in equities.

Continued on page 38

Special
ort
on
11

PI
DC20014STATLR FMPJ M
STATISTICAL REFERENCE INDEX
4520 EAST-WEST HWY SU 800
WASHINGTON DC 20014

Getty termination: First in a new field?

By Fred Williams

WHITE PLAINS, N.Y. — Texaco Inc.'s proposed spinoff/termination of a $698 million Getty Oil Co. pension plan might be the forerunner of similar moves by debt-strapped major oil companies involved in costly acquisitions and burdened by falling oil prices.

Chevron Corp. and Mobil Oil Co. are among the most likely termination prospects, one analyst said.

Analysts predict Texaco will use the excess assets from the spinoff/termination to pay some of the debt Texaco has been saddled with since it acquired Getty in February 1984.

Texaco hopes to recapture as much as $250 million from the pension fund. Company officials said such a move would provide security for retirees while retaining current employees under a defined benefit plan.

In a spinoff/termination, a single plan is spun off into two — one for retirees and one for active employees. The excess assets are placed in the retirees' plan, which then is terminated. The plan for active employees continues uninterrupted.

Getty was acquired by Texaco in a $10.1 billion cash transaction.

Employees who left the company after Jan. 1, 1984, and before Dec. 31, 1984, are to be treated as fully vested as of the date of their separation, documents filed with the Pension Benefit Guaranty Corp. said.

J. David Keough, Texaco senior assistant treasurer, said an insurance company hasn't been selected to provide the annuities for retirees.

Reacting to criticism that terminating the plan might jeopardize some employees' expectations for retirement benefits, Mr. Keough said benefits actually would be improved by the termination.

"Those who are not vested will be, and will be getting a benefit that they really are not entitled to. Many people will be getting a pension benefit now that they wouldn't have gotten otherwise," he said.

Texaco officials were tight-lipped about the reasons for the proposed termination.

PBGC officials said an amended filing will show how much will be split off from the plan for active and retired employees.

Philip Kehl, an oil industry analyst with Argus Research Corp., said Texaco probably will apply the recovered assets to help reduce the massive debt burden it carries as a result of the Getty acquisition.

"They have taken on a tremendous debt as a result of the Getty purchase," Mr. Kehl said. "Reduction of that debt is the main area where they can use it. Chevron and Texaco both will be working for the next couple of years working off debt incurred through acquisitions."

Chevron acquired Gulf Oil Corp. in 1984.

Debt burdens, coupled with softening international oil prices, will "push out for a couple of years longer the period needed to work down that much debt," he said.

Texaco had $10.4 billion of long-term debt at the end of September 1984, compared with $2.1 billion at the end of 1983.

"There is something going on. You have seen Occidental and Texaco do it (terminate pension plans) and you will see at least two more in 1985," one analyst predicted.

As for Texaco, he said, "the company is pulling down its debt. What has happened is that a lot of money has accrued in that pension plan. As it accrued, it was a tax deduction and increased without taxes. Now it will be drawn out and becomes a source of funds for Texaco to use in its debt restructuring or reduction."

"It is in their interest to reduce that debt as much as they can since their debt to equity now is quite high," he said. Texaco already has sold about $2 billion in assets acquired in the Getty acquisition, he said.

A spokesman for Rep. Edward R. Roybal, D-Calif., said legislation definitely will be introduced into the current session of Congress to limit severely an employer's ability to recapture excess assets by terminating an overfunded defined benefit pension plan.

Rep. Roybal introduced a similar bill during the last session, which ended before the bill could be considered (*Pensions & Investment Age*, Oct. 1).

Roger Thomas, counsel to the House Select Committee on Aging, called Texaco's planned termination of the Getty plan "intolerable," "repugnant" and "Robin Hood in reverse."

He said terminations similar to the planned Texaco action "deprive employees of the benefit levels to which they are entitled."

Karen Ferguson, director of the Pension Rights Center in Washington, D.C. called the Texaco proposal "an outrage."

The Texaco termination of the Getty plan would place it among the largest reversion amounts. ■

Hires 10 managers

UT hikes fixed income

By Rose Darby

HARTFORD, Conn. — The $2.5 billion United Technologies Corp. U.S. master trust plan has doubled its fixed-income exposure by hiring four specialty managers, four intermediate- to long-term managers and two shorter-term managers.

Equities and international bonds likely will be the next phase of an asset allocation plan, under way since late 1984, according to Beverly Lannquist Hamilton, vice president-pension investments.

About $400 million to $500 million were allocated among the 10 fixed-income managers, she said.

Roughly 45% of the total, or $180 million to $225 million, will be managed by the intermediate- to long-term managers: Loomis, Sayles & Co. Inc., Boston; Morgan Stanley Asset Management Inc., New York; Miller, Anderson & Sherrerd, Bala Cynwyd, Pa.; and Jennison Associates Capital Corp., New York.

Another 35%, or $140 million to $175 million, will be allocated to specialty bond managers to invest in private placements, convertibles, and high-yield fixed-income securities, she said.

Trust Company of the West, Los Angeles, will manage an account in its private placement fund; Delaware Investment Advisers Inc., Philadelphia, and W.R. Huff Asset Management, New York, will manage high-yield bond portfolios; and MacKay-Shields Financial, New York, will run a convertible bond account, she said.

The remaining 20%, or $80 million to $100 million, will be run by Neuberger & Berman Pension Management, New York, and Payden & Rygel, Los Angeles, in portfolios with maturities of up to five years, she said.

Ms. Hamilton wouldn't say how much was given to each manager.

Funding was a two-step process, she explained: "We shifted a contribution of $100 million over in September, and we just accomplished the second part; that will come from the equity area."

When asked if any current equity managers would be dropped to fund the move, Ms. Hamilton would only comment that the equity area would be looked at next. ■

Union fund indexes $1.5 billion

By Mark Westerbeck

NEW YORK — A significant switch to index funds could save more than $4 million in portfolio management fees for the $5.2 billion Central States Teamsters Fund, said George W. Lehr, executive director.

Morgan Stanley Inc., the named fiduciary for the Teamsters, Central States, Southeast and Southwest Areas Pension Fund, has indexed more than $1.5 billion of the fund's equity assets.

The allocation to equities was increased during the second half of January, when Bankers Trust Co. and Mellon Capital Management were hired for predominantly "active indexed" management.

At the same time, Alliance Capital Management Corp., MacKay-Shields Financial Corp. and McCowan Associates Inc. were dropped as active equity managers.

The change leaves four equity managers, and reflects Morgan Stanley Inc.'s defeated effort to centralize management of equity assets with its investment management arm, Morgan Stanley Asset Management Inc.

That attempt was shot down in January when the Department of Labor refused to approve the plan, citing conflict of interest (*Pensions & Investment Age*, Jan. 21).

Continued on page 40

Late news

Continued from page 1

Management, Philadelphia; Trinity Investment Management Corp., Boston; United Capital Management, Denver; and Wilmington Capital Management Inc., Wilmington, Del.

Ms. Miller said the retirement system also has made an offer for a permanent chief investment officer, whose hiring could be announced Feb. 15. The person was not named.

On Jan. 25, the system also completed moving $1 billion in equity assets into an index fund with Wells Fargo Investment Advisors, San Francisco.

PBGC premium hike

WASHINGTON — The Pension Benefit Guaranty Corp. will likely ask for an annual premium of about $7.50 per participant, an increase from the current $2.60, observers said. The boost is lower than some had expected.

Charles C. Tharp, the agency's executive director, declined to comment, saying the increase would be in President Reagan's budget, due to be released Feb. 4.

Joint venture formed

NEW YORK — M.D. Sass Investors Services Inc. and Elliot & Page Ltd. of Toronto have formed a joint venture, Sass, Elliot & Page Inc. to offer investment capability in the U.S. to Canadian pension funds.

Elliot & Page manages $2.5 billion for clients, of which roughly $354 million is Canadian pension fund assets.

D.C. hires State Street

WASHINGTON — The District of Columbia Retirement Board has hired State Street Bank & Trust Co., Boston, as master trustee for its $554 million in assets, replacing American Security Bank of Washington, according to Earl Johnson, executive director.

Real estate pool

CHARLOTTE, N.C. — NCNB National Bank's open-end real estate pool grew to $170 million in assets after taking down $18.5 million in contributions in January.

New clients, who committed late in 1984, included the $1.5 billion Ohio School Employees' Retirement System, Columbus, Ohio, for $15 million, and the $80 million Commerce Clearing House Inc. pension fund, Chicago, for $2 million.

Personnel news

• WASHINGTON — Kevin W. Putt has been promoted to assistant executive director of the Pension Benefit Guaranty Corp. Mr. Putt will serve as a senior management official in the agency's dealings with Congress and other policy and resource matters.

• NEW YORK — Andre Sharon, first vice president and director of international research at Drexel Burnham Lambert Investment Advisors, Philadelphia, resigned to join Simms Capital Management Inc. as a partner, effective Feb. 1.

Mr. Sharon said he was joining Simms — which specializes in global management — in part because it offered "the chance of a lifetime to do something entrepreneurial and to practice what I've been preaching."

Simms has $25 million under management globally for non-tax-exempt clients.

• LONDON — Citicorp Investment Management Inc. has hired Tony Watson as its new chief investment officer-institutional international investments and chairman of its international asset management committee. He comes from Touche Remnant Pension Fund Management Ltd., London, where he was a managing director.

Checks clear faster

NORTHFIELD, Ill. — Phoenix-Hecht Inc., a cash management consulting firm, announced check clearing times have become one-tenth of a day faster in the past six months.

According to Larry Marks, president of Phoenix-Hecht, "This seemingly small change is actually quite large in the world of cash management, and can impact the bottom line of corporations by tens of thousands of dollars."

The firm's check clearing study measures the time it takes to clear from the deposit bank back to the drawee bank.

Highlights

CASH MANAGEMENT

Workstation producer files for Chapter 11 31
Treasury system brings unexpected boon 31
CompuServe effort a success 31
Current yields on money market funds 32

CORPORATE FINANCE

Salomon Brothers widens underwriting lead ... 11
Lead was evident early in game 12
Merrill maintains equity hold 12
High tech still offers rewards 13
Drexel continues to gain force 14
Morgan Stanley strong in '84 15
New corporate issues 16

FUTURES & OPTIONS

Futures brokers censure DOL proposal 21
CFTC rules called unclear 21
Equifax set for futures, options use 21

REAL ESTATE

Executive says marketers don't help much 27
Bank of Boston deal collapses 27
Conference wrap-up 27

GENERAL NEWS

Soft-dollar use under pressure 4
Shareholder council now official 6
4th-quarter winners listed 9

DEPARTMENTS

Current accounts 42
Dan Dorfman 34
International update 25
Letters 8
Market beat 19
Money movers 42
Opinion 8
People 33
Washington notebook 24

Vol. 13, No. 3 — Pensions & Investment Age (ISSN 0273-5466) is published every other Monday at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill., and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 740 Rush St., Chicago, Ill. 60611. Copyright 1985.

N

ROLLERT & SULLIVAN, INC.

INVESTMENT MANAGEMENT

BOSTON
470 Atlantic Avenue
Boston, MA 02210
(617) 542-0601
(800) 343-0811

NEW YORK
375 Park Avenue
New York, NY 10152
(212) 750-8484

Fund shareholders organization formed

WASHINGTON — The Council for Institutional Investors, formed to assert the rights of pension fund shareholders, formally organized last month after six months of preparations.

The organization's initial efforts will be corporate takeover issues, but might expand to other areas in the future.

It is expected to meet with officials from Phillips Petroleum Co., Bartlesville, Okla., and T. Boone Pickens Jr. as its first venture (*see related story on page 1*).

The council has commitments from 22 pension funds — mostly governmental funds — representing more than $100 billion in assets.

More might join before the initial sign-up period ends Feb. 8.

California Treasurer Jesse Unruh, who pitched the concept to potential members, is one of the council's three co-chairmen. Mr. Unruh's office is custodian for $35 billion in pension assets held by the state's teachers' and public employees' funds.

In addition, John Konrad, chairman of the $8.7 billion Wisconsin State Board of Investments, and Harrison J. Goldin, New York City comptroller and trustee for the $21.1 billion New York City Employees Retirement System, are the other co-chairmen. The New York City system comprises five funds.

Serving as council secretary is Henry E. Parker, Connecticut treasurer and sole trustee for the State of Connecticut Trust Funds. Bruce Kallos, chairman-investment committee for the Delaware State Employees' Retirement Fund, is the council's treasurer.

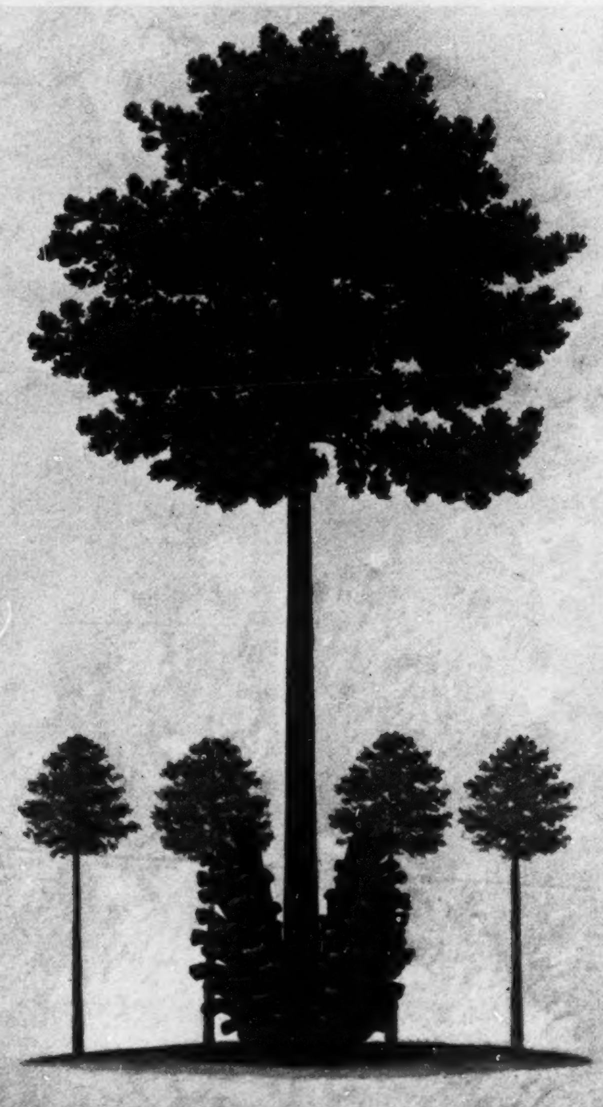
Other public funds that are committed to joining are the New Jersey Division of Investments, the Los Angeles Fire & Police Pension System, the Los Angeles City Employees' Retirement System, the Michigan State Employees' Retirement System, the Minnesota State Board of Investment, the Massachusetts Pension Reserve Investment Trust, the Washington, D.C., Retirement Board, the Washington Suburban Sanitary Commission and the Navy Relief Fund.

Two Taft-Hartley funds, the Sheet Metal Workers National Pension Fund and the Southern California Food and Commercial Workers Union & Food Employers Joint Trust Fund, also signed on.

Considering joining are the five Chicago pension funds for police, firefighters, teachers, laborers and municipal employees; the San Bernardino County (Calif.) Employees' Retirement Association and the San Francisco City and County Employees' Retirement System. ■

Corrections

- Two pension fund accounts won by **Security Capital Real Estate**, New York, were misidentified in the "Money movers" and "Current accounts" section of the Jan. 7 issue. Security Capital's open-end fund was selected by Dow Corning Co. to split about $11 million with a closed-end fund run by JMB Institutional Realty. Also, Georgia-Pacific Corp. committed $5 million to the Security Capital fund.
- **Gary Gerstein**, who has joined Century Capital as a general partner, was with Neuberger & Berman immediately before joining Century Capital. Before joining Neuberger, he was a senior vice president at Chase Investors Corp.
- An article in the Jan. 21 issue stated incorrectly that the **California State Teachers Retirement System** issued bonds. The bonds were state general obligation bonds.
- **F.I.A. Associates**, Sacramento, had $342.3 million in new business as of Nov. 15, 1984. This amount puts the firm in second place behind Goldman, Sachs in the Jan. 7 "score card" listing of real estate advisory firms with less than $1 billion under management. Hutton Capital Management should not have been on the list.
- The **Marine Engineers Beneficial Association**'s $72 million contribution to its pension plan, reported in the profile in the Jan. 21 issue, represents a 5.3% decline from the $76 million contribution in 1983. All contributions are employer contributions.



No other investment grows like this.

Over the past thirty years, timberland has significantly outperformed both stocks and bonds.

Better yet, it achieves higher real rates of return while reducing the total volatility of your portfolio.

With prices currently depressed and expected to rise over the long term, industry analysts consider timberland a substantially undervalued asset.

The time to buy is now.

And the fund to buy is Timberfund.™

A closed-end fund from Equitable, it offers pension sponsors even more than most timberland investments.

A flexible policy with regard to timing lets us buy low and sell high. We'll hold properties until the time is right to sell. Meanwhile, Timberfund will be actively managed to enhance returns with sophisticated marketing of timber products and on-site scientific forestland management.

All of this allows us to increase the potential for maximizing capital appreciation and cash flow over the life of the investment.

Contact Nick Lopardo, Senior Vice President, The Equitable, 1270 Avenue of the Americas, New York, New York 10020, (212) 315-7759.

He'll show you how we can help your pension fund grow.

THE EQUITABLE
Financial Services

© 1984. The Equitable Life Assurance Society of the United States, New York, New York

Top underwriter captures quarter of market in 1984

NEW YORK — Salomon Brothers widened its lead in the underwriting scene in 1984, taking nearly a fourth of the volume generated in the marketplace.

Its lead came in a year when total financings were down from 1983 levels. Debt offerings, however, soared, while common stock volume dropped precipitously from previous levels.

According to IDD Information Services, corporations raised $82.2 billion last year. Salomon took almost $19.3 billion or a 23.4% market share under a bonus-credit-to-book-manager system. In 1983, the firm underwrote $13.1 billion for a 13.5% market share.

Salomon maintained its lead under other credit systems as well. It held a 25.8% market share based on full credit to lead manager and a 22.4% share based on an equal credit system.

Under the bonus-credit system, First Boston Corp. ran a distant second with 12.2% of the market or $10 billion in underwritten offerings. Merrill Lynch Capital Markets took third with 11% or $9.1 billion.

Drexel Burnham Lambert Inc., meanwhile, continued its climb up the charts, moving to fourth from sixth in 1983. With a 10.3% market share or $8.5 billion, Drexel edged out Goldman, Sachs & Co. for that position. Goldman took 10% of 1984 volume or $8.2 billion.

Salomon's lead was less dramatic when measured by actual underwriting commitment for public offerings. The firm participated in 509 public offerings last year. Its actual underwriting commitment for those deals was $12 billion — a 14.6% market share.

Drexel Burnham ranked second by this measure, underwriting $8.4 billion in 545 offerings for a 10.2% market share. Merrill Lynch, which participated in 583 deals, the most of any investment firm, came in a close third with $8.3 billion or a 10.1% piece of the market.

First Boston and Goldman followed, taking 8.6% and 7.5% of the market, respectively. First Boston committed to $7 billion in 492 offerings, while Goldman underwrote $6.2 billion in 481 deals.

Salomon's dominance comes in a year when overall financings dropped 15.3% from the $97.1 billion generated in 1983. Even so, 1984 was the second biggest year for public offerings, with total volume exceeding 1982's $62.6 billion output by 31%, according to IDD.

A key contributor to 1984 volume was the surge in non-convertible debt financing. New issues in that market jumped to $65.2 billion in 1984, from $46.1 billion in 1983 — a 41% rise, according to IDD.

Much of the activity came during the second half of the year as interest rates were falling. The third and fourth quarters produced $39.4 billion in straight debt financings, accounting for nearly half of total financing volume for the year.

As in the overall rankings, Salomon remained the clear leader in underwriting straight debt. Its leading market share increased to 27.5% last year, from 20.3% in 1983, under IDD's bonus credit system, while the firm's share of dollar volume rose to $17.9 billion from $9.3 billion.

Ranking second was First Boston, with $8.3 billion or a 12.7% market share of straight debt. Drexel followed with $7.7 billion or an 11.8% piece of the market.

Salomon's dominance and Drexel's rise up the charts (it placed fifth in 1983 in straight debt financings and seventh in 1982) can be attributed, in part, to their participation in the largest single offerings last year.

Among the top five deals, Salomon was lead manager for Sweden's $1.5 billion (net proceeds) floating rate debt offering, Travelers Mortgage Securities' $1.2 billion collateralized mortgage obligations and Chevron Capital USA's $998 million and $996 million note offerings.

Drexel was lead manager for the $1.3 billion debt financing by Metromedia Inc. and the $1.2 billion in notes offered by Occidental Petroleum Corp.

The strong standings of the two firms underscore the increasing importance of mortgage-backed securities and high-yield debt instruments. Offerings in these areas totaled $11.2 billion and $14.1 billion, respectively. Together they increased about $12 billion, accounting for almost 60% of the $19.1 billion rise in straight debt financing.

Salomon traditionally has held the lead in the mortgage-backed bond market. According to IDD, the firm was lead manager for almost $4.2 billion — a 37.2% share of the total market. First Boston and Shearson Lehman/American Express were the firm's closest competitors. They managed $3.1 billion and $1.5 billion, respectively, and took 28% and 13.7%, respectively, of the mortgage-backed market.

While numerous investment banking firms have moved into the junk bond market, Drexel, which created that market, continues to manage the lion's share.

According to IDD, Drexel managed $9.6 billion in high-yield debt offerings, for a 67.7% portion of the market. Prudential-Bache Securities Inc., which ranked second, was lead manager for $980 million or only 6.9% of the market.

Although straight debt financings climbed above 1983 levels last year, convertible debt offerings declined to $4.1 billion from $6.1 billion in 1983.

Much of last year's activity came in the second half of the year. Falling interest rates combined with a generally sluggish stock market set the stage for the third- and fourth-quarter resurgence. Corporations issued $3.2 billion in convertible debt during that period, compared with only $881 million in the first half.

Shearson dominated the convertible debt scene, moving to first place from third in 1983. By IDD's bonus-credit measure, it captured $940 million or 23.1% of that market. First Boston underwrote $818 million or 20.1%, while Goldman ranked third with $473 million or 11.6%.

While debt financing surged in 1984, another dramatic development in 1984 was the sharp drop in common stock issues and initial public offerings because of corporate reluctance to issue stock in an uncertain market climate.

Common stock volume shrank to 556 issues totaling just less than $9 billion in 1984, from 1,418 offerings totaling $36.6 billion in 1983, according to IDD. At the same time, initial public offerings volume sunk to 350 offerings amounting to $3.8 billion in 1984 from 686 issues totaling $12.4 billion in 1983.

Investment bankers, however, argued the 1983 numbers were aberrations, especially in the IPO market. They say the data reflected the maturing of an inordinate number of venture capital companies — a market that had surged ahead following the lowering of the capital gains tax rate in 1978.

While IPO financings fell off sharply from 1983, investment bankers note 1984 volume was more than double that of 1982. According to IDD, IPO financings in 1982 totaled $1.4 billion.

Merrill Lynch took the biggest portion of the common stock and IPO markets under a bonus-credit system. The firm underwrote $930 million in 54 common stock offerings during the year to win a 10.4% share of the market. Following Merrill were Goldman, Sachs with $836.5 million and Morgan Stanley, $721 million.

Merrill captured 11.6% of the IPO market, underwriting $442 million in 23 offerings. The firm was followed by Morgan Stanley, which underwrote $309.4 million under a bonus-credit system, and Shearson, which underwrote $275 million.

While IDD's bonus credit system put Merrill in first place in the common stock and IPO market, Morgan Stanley won by a full-credit-to-lead-manager measure. By this yardstick, Morgan held a 13.8% market share in common stock, with $1.2 billion credited to the firm and a 17.1% market stake in IPOs, with $648 million of that market.

A leading factor in Morgan's showing was its strength last year in U.S. offerings made by foreign companies.

The firm was lead manager in British Telecommunications' $279 million equity offering — an IPO and the single largest equity deal for 1984. It also managed the two next largest foreign IPO deals issued in the United States — Reuters Holdings' $107 million offering and the $102 million IPO issued by Cadbury Schweppes.

Preferred stock financing also fell in 1984, but the drop was not as dramatic as in common stock. IDD reports financings in this area totaled $3.1 billion for the year vs. $5.1 billion in 1983.

In the area of convertible preferred offerings, however, the fall was much more severe. Financings in this category amounted to $818 million, compared with $3.1 billion in 1983. Still, convertible preferred volume last year represented a 61% increase from the $509 million generated in 1982.

Goldman led other underwriters in both the non-convertible and convertible preferred markets, raising $576 million in straight preferred offerings and $180 million in convertible preferred offerings in 1984, and giving the firm an 18.5% and 22% stake in those respective markets.

Shearson and Merrill took second and third place in the straight preferred rankings. Shearson raised $538 million, while Merrill underwrote $440 million.

In the convertible preferred market, Morgan Stanley placed second, with $179.5 million piece of the market. Third-ranking First Boston held $164 million share of the market.

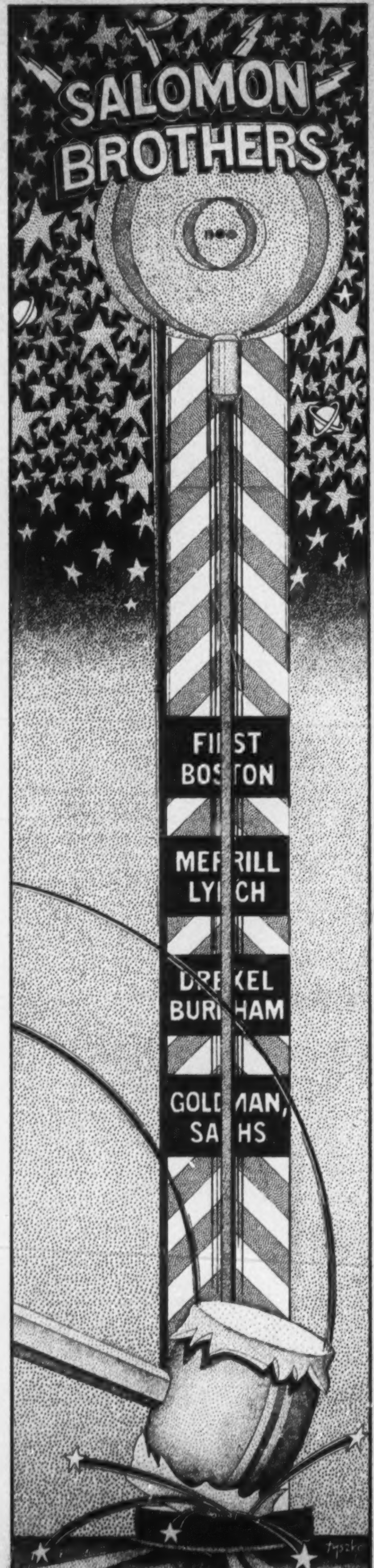
In a volume breakdown by industry, financial companies were the biggest issuers in 1984, followed by industrial companies. The former came out with $37.4 billion in issues, while the latter's volume totaled $30.8 billion.

Utilities raised $9.5 billion last year. Agency issuers raised $4.5 billion.

Salomon took the underwriting lead for financial companies, raising $10.3 billion for a 27.4% market share, under a bonus credit method. It also took 53.2% or $2.4 billion of the total volume generated by agency issuers.

Drexel led in the industrial area, managing $6.8 billion for a 22% market share. Morgan Stanley won top honors in the utility area, taking $1.8 billion or 19.3% of the total volume there.

In one industry subset, high technology, Shearson dominated. Of the $2.2 billion issued by these companies, it underwrote 28.7% or $639 million. ▪



The stories in this section were written by Marci Baker